

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: /
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



Published under direction of the Board of Agriculture of Nova Scotia.

VOL. I. HALIFAX, N. S., JANUARY AND FEBRUARY, 1869. No. 45.

CONTENTS :

	PAGE.		PAGE.
Editorial Notes.....	393	THE ORCHARD:	
Letter from Paris.....	394	Apple Culture.....	401
Extra Awards and Diplomas at Provincial Exhibition of 1868..	396	POULTRY YARD:	
THE FARM:		How we Keep our Hens.....	402
The Butter Cow of Windsor.....	396	REPORTS OF AGRICULTURAL SOCIETIES:	
The "Climax" Potato—Lavender Kids—A Model Society..	397	Barrington Agricultural Society—Mahone Bay Society....	402
The Edinburgh Christmas Club.....	398	Milford Haven Society—Wallace Society—Aylesford Society	403
Exhibition and Fair at New Annan.....	398	Bridgetown Exhibition.....	404
Relative Values of a Man and Cow.....	398	NATURAL HISTORY:	
Sheep and Dogs—Keeping Stock in a Society.....	399	The Musk Deer of India.....	404
The New Potato Disease.....	399	MISCELLANEOUS:	
THE GARDEN:		Botanical Society of Edinburgh—The Zirconia Light.....	406
The Golden Champion Grape—Cannas in the Open Garden..	400	Small Talk—Flying Straws.....	406
Aucuba Japonica—The Latest Novelty in Climbers.....	400	Agricultural Ode.....	407
		Publications received.....	408

EDITORIAL NOTES.

HALIFAX, 16th Feb., 1869.

The coldest day we have had this winter was the 22nd of January, when our thermometer at Lucyfield, in the northern part of Halifax County, went down to 7° below zero. At Bedford, the same morning, it was 3° below zero, and in the City about the same.

On New Year's Day the thermometer went down to zero, one or two degrees below it at Mount Uniacke. But there has been no excessively cold weather this season, and comparatively very little wind or boisterous weather. The winter has been pleasant, with only enough of snow and frost to give continuous and comfortable sleighing on every road, throughout the length and breadth of the Province, except, indeed, Water Street, the great commercial thoroughfare of the city, which is as rugged with *cahots* as the meanest log-path in the Dominion.

It is now a good time for farmers to

cart out their stable manure to the fields where it is to be used in Spring; it is easily carried over the snow. By doing it now, Spring work will be facilitated, and there is no poaching of the land by heavy wheels. Fence poles and firewood for the year are also being got out by every thrifty farmer, and the sleighing is so good, and the weather so pleasant, that there is no excuse for neglect.

We intend to continue the plan adopted some time ago of issuing the *Journal* once every two months, of double the original size, so as to afford scope for a better classification of subjects and a more varied bill of fare. In the Farm Department this month will be found a description, by Mr. Heffron, of the newest of the new seedling Potatoes; some remarks on a vexed subject—the best method of keeping Live Stock in a Society; an angry bark at Dogs from the *Toronto Globe*; an appeal from Yarmouth to Agricultural liberality; farther extracts from Mr. O'Brien's Dairy Register; and a lesson of advice to young

gents about town, who think that farming is not a dignified profession. Mr. Hutton favours our readers with another letter, picturing a phase of Exhibition life to which we called attention in a previous number, viz., the Farmers' and Butchers' Christmas Clubs. The letters of our Paris correspondent are readable and suggestive.

In the Orchard Department an excellent and thoroughly practical Essay on Apple Culture will be found.

Our Poultry Column is filled with practical suggestions on the best and simplest methods of managing and feeding Common Hens. We should be glad to afford the Poultry more scope in our pages if some of our numerous fanciers would take the trouble to jot down their observations. Since Colonel Duvar left us, the Poultry Club has not displayed so much activity, but surely some of the members desire to make known the merits of the new breeds that have been introduced, and our columns are always open to them.

The Garden now begins to engage the thoughts of all who are interested in rural life, and of those also who, being prisoners in the city, patronise the *rus in urbe*. The first thing to be done is to mature our plans for the season, decide what improvements are necessary, what to sow, what to plant, and how our garden crops are to be treated: and then let the necessary seeds be obtained. In order to ensure the full benefit of our summers, it is necessary to have young plants of cabbages, cauliflowers, tomatoes, and many others, brought forward early in the hot-bed. The hot-bed may be made up any time after the first week in March. If made up before that time it will require a larger quantity of manure, and that must consist of fresh stable manure, obtained where the horses are fed upon grain. Later in the season, the ordinary horse manure, mixed with cow dung, will be sufficient to generate the heat required. The manure should not be covered with too thick a layer of earth—six inches is an ample depth; and instead of sowing the seeds in the soil, they are better sown in very shallow boxes, with somewhat open bottoms, each kind in a separate box. Where this method is adopted a still thinner layer of soil may be laid upon the manure, and the heat will be economized. Several articles will be found in our Garden Department descriptive of a new Grape Vine, and a new Climber, and notices of Cannas, and Aucubas, as plants well adapted for summer ornament, and not without interest in the dull winter season. Since our article on Aucubas was written we have received the *Gardeners' Monthly*, and find that Mr. Meehan, the Editor, is of a mind with ourselves, since he has treated his readers to an excellent article on the new Aucubas, which we intend to reprint in our next number.

In Natural History we have this month a very full account of the habits of the Musk Deer, which, besides introducing to us an extremely interesting animal that is very little known, brings to the notice of naturalists a phase in animal life that is almost new to them, viz., the change of habit induced by external circumstances.

Under the title "Small Talk—Flying Straws" will be found a heap of facts

swept together chiefly from the pages of Agricultural papers which reach us as exchanges.

The list of Extra Awards and Diplomas granted to the exhibitors at the late Exhibition whose meritorious articles were overlooked, will be perused with interest. The final report of the Exhibition is ready for the printer, with the exception of one or two small matters of detail which require to be settled before the Report can be issued as perfect. It is a more voluminous document than was expected. No pains have been spared to make it as full and accurate as possible. Besides the Public Addresses delivered, it contains the particulars of every prize offered, the number of competitors for each, the name and address of the winner of each prize, the names of prize animals as far as known, and the amounts awarded. The Extras exhibited are described in the same full manner. The names of the Judges, in each section, are given, and all other particulars likely to be of interest, or useful in enabling comparisons to be made with the detailed results of past and future Exhibitions. The Committee's labour did not end when the Exhibition closed; they have had repeated meetings, settling claims and examining into disputed points. If every one has not obtained satisfaction, it is not for want of pains on the part of the Executive Committee and the various sub-Committees. The Diploma has been engraved by Mr. Clark, and is now ready for issue to those Exhibitors to whom a Diploma or Honorable Mention was awarded.

We understand that a Deputation from the Game and Fisheries Protection Society visited the Parish of Sackville last week, for the purpose of examining the Sackville River. We trust their attention was called to the destructive practice of the saw-millers in throwing all their sawdust into the River, and thereby poisoning the fish. The Saw Mills represent a more important interest than any River Fisheries we have in the Province; but there is no need of interfering with the prosecution of lumbering in order to guard the fisheries. All that is wanted is to compel the lumberers to throw their sawdust aside upon the land, where it can be carted away for farm purposes, or else, burnt. There can be no

hardship in seeking this simple remedy, and then we should have our rivers well stocked with fish, and all jealousy between the milling and fishing interests set at rest.

(Special from our Paris Correspondent.)

PARIS, January 29, 1869.

There is no country so advanced that it has not something yet to learn; and no nation's agriculture but has something to teach.—Great efforts are now required to solve that agricultural problem which includes all others—the best system of cultivation; and it cannot be otherwise than instructive to be aware of what Europe is doing in this respect. My letters shall therefore be confined to the actualities of Continental farming; in practice, to that which is useful; in science, to what is prudent. In all work, philosophers recommend method; and, following Byron's plan, "my method is to begin with the beginning." Aware of the advantages of a "rotation" in farming, the agricultural system of each European nation will be noted in turn. However M. Bismarck may deny to France the premier rank in Europe in politics, he must concede her this position in a practical and experimental agriculture.

France can never be a country of "monster farms." Since the Revolution of 1789, landed property, by the abolition of the law of primogeniture, has been extremely divided. The arable land is about 113 millions of acres, of which small proprietors own 69, medium 13, and large owners 28. Not only by their number, but by territory, the small holders predominate. In the neighborhood of towns land is most split up, almost into the cottier or allotment system; but never so small as to be ridiculous, as when this "minute division of the soil" is in question, the eldest member of the family either buys up or rents the shares of the others, or a wealthy proprietor steps in as purchaser, the transfer of land being as easily negotiated as government stock. The climate of the Empire embraces the productions of the temperate zone in its fullest extent, which, consequently, are as varied as they are rich. The cultivators are industrious in every rank, their condition comfortable, rather than luxurious; and where badly off, are never positively in want. About twenty-five per cent. of the general taxation of the country falls upon agriculture. The extensive forests which cover so large a portion of the Empire are in the hands of the government, being leased out to the highest bidder, who has power to sub-let, either for the timber, which must be cut "according to law," or for hunting. The two great "revolutions" in French farming have taken place within the last fifty years. The first was that in "rotation" of crops. An old three-course was followed, consisting of the division of a farm into two portions, one being in meadow; the other was subdivided into equal parts,—one of these was under grain, the other fallow, that is, remained unproductive once in every two or three years. Thanks to progress, a root crop, generally potatoes, has superseded the fallow. A five-course rotation, comprising roots, wheat, clover, wheat and oats, is the favorite at present. The second revolution, dating some thirty years back, has been in manuring—that is, the employment of arti-

ficial or chemical manures as adjuncts or complements to that of the farm-yard. This subject will be treated upon by-and-by. As a general observation, French agriculturists are not book-farmers—they are on the whole quick and ingenious, anxious for more light on their duties, liberal enough to change where improvement is safe, but rather inclined to look to their "paternal" government to undertake the risks and perils of innovation. Not that France is wanting in "philanthropic farmers"—courageous to speculate, and patient to wait results. One notable example is that of Mathieu de Dombasté. For twelve years he endeavored to cultivate a barren spot regardless of expense—the high farming principle. He has avowed he never could raise more than 33 bushels of wheat, and 17 tons of beet per acre, and every year of the twelve that his fancy farming continued his books balanced with a loss.

Possibly no government does more to encourage Agriculture than that of France, and no monarch has surpassed the Emperor. He is a go-ahead farmer himself—has founded, out of his private fortune, several model farms to test the best systems of culture, and to essay all new inventions; above all, to adapt his examples to the wants of the country, discarding all luxury, all that magnificent trifling which destroys the best intentions of well-disposed proprietors here, as elsewhere. He has two example farms at the gates of Paris nearly; nine, in addition to a Colony, in the desert of Gascogne; eight in Champagne; three in Sologne; one on the granite slopes of Limousin; and one in Italy, near Bologna. He receives on the average four per cent. on his capital. His cousin, the Princess Bacchioci, guards a hermit life on her model farm, in the wilds of Bretagne. The Minister of Agriculture is voted every year a respectable sum for his department, as also for the execution of public works more or less allied to rural interests, such as roads, railways, canals, &c. Some nine Departments are selected every year, in which are held, in Spring or Summer, art, industrial and agricultural exhibitions, with prizes for local competitors as well as all-comers—so that, in ten years, each Department has its subsidized little "World's Fair." Then there are governmental farms, fitted up with laboratories, where Science has but to cross the threshold to test its own conclusions—there are agricultural schools of various categories, where pupils graduate and receive diplomas. Further—there is offered to each Department annually a series of eight prizes of honor, varying from an object of art valued at 200 francs, along with a purse of 600 francs, up to a work of art, valued at 500 francs, along with a purse of 2,000 francs, (with medals, and smaller purses for agents and farm bailiffs,) for large and small proprietors, or co-proprietors, having, in the opinion of the inspector, the best managed farms, &c., in their Department.

France has but lately terminated a great agricultural inquiry, and the Commissioners have probed every grievance. The General Society of Agriculturists have still later sat upon the Report, in a Congress held in Paris. Passing over the consideration of matters purely local, the Society turned out a good deal of "sound corn." It recommends, from 1870, a general, instead of local cattle shows, the first to be held in Paris, where prizes would be given, not only for cattle of pure

breed, but for animals preserving special attributes. It is proposed to elect the judges, three in number, by "the universal suffrage" vote of the exhibitors. The same system will be applied to the annual show of implements: one prize only will be given in each class, and the entries limited to France. An International Implement Exhibition, however, is to be organized. The subject of agricultural education was largely entered into. The resolutions were in favor of founding additional State experimental farms, a Central College, an improvement in the pecuniary condition of the boarders at the Farm Schools, and the affiliation of agriculture on school studies generally. It was not to be "professed" to children—they should only be trained to "like" it; girls should be instructed in the art, and a trial should be made of working school-farms by giving the pupils a partnership in the profits.

In every industry in France almost, woman has her "Rights" in being permitted to work, and consequently she is to be found largely employed in agriculture, where alongside men "the grey mare often turns out the better horse." Machines for abridging labor are finding their natural home, but home-manufactured instruments are clumsy, bad, and dear. It is curious that so few English or American implement makers seek a foreign market. From the olive land of Spain, across fair Italy through the wilds of Bohemia and to the steppes of Russia, but two American and three English manufacturer names were all I met with—and there is a market for the article, as the "cheap labor question" is everywhere pressing.

The scientific world may be said to be concentrating its attention on the comparative value of chemical manures, limited to the phosphates and nitrates, and the rotating of crops, whose analyses indicate sympathetic relations. Farm-yard manure has not fallen in estimation of course,—but with phosphate of lime, nitrate of soda, and the salts of potash, hitherto they are in store for farmers. Some experiments at the government schools are pending, which promise to be interesting; French capital is to be employed to work the Veritable quarries of phosphate of lime in Spain; Prussia and Hungary are to supply the potash, as well as sea-water—Peru the nitrates—and coal manufactories the sulphate of ammonia.

Cold and tepid water baths, for cattle, are creeping into favor as therapeutic agents in the treatment of inflammatory diseases.

No country can derive more benefit from sheep farming than France. Knowing this, it is not surprising that the Emperor has decided upon opening a training school for shepherds. For the last thirty years the number of sheep reared in the country has been on the decline, the cause being the incapacity of the shepherds. The new school will be founded upon one of the State farms in the north of France, famous for its Dishley rams and Dishley merinos. It will be open to all France; the pupils will serve an apprenticeship of two years, receiving a certificate at the end of this period, and for 300, the equivalent of their wages. They will attend lectures on all that belongs to the Ovine race, and will be instructed in reading, writing and arithmetic. The Director will be M. Daubenton, the first authority on sheep in France. Other schools will be established in other parts of the Empire.

In Paris there are no dust-bins—the

kitchen refuse is thrown into the street after sunset, and removed in the morning by the contractor's carts as manure. The night-soil is collected according to three different systems—in a reservoir, which is pumped out periodically, and conveyed in large barrels to the sub-works, where it is made into powder, and sold for 5¢ per 22 gallons, or sold in its liquid state. It is also collected in iron cylinders or strong small barrels hermetically closed with plaster of Paris. The same companies prepare sulphate of ammonia, and animal black from the carcasses of deceased animals, sell dried blood, horn clippings, &c. Well, a company from Brussels is in course of formation to buy up all these systems, and completely revolutionize the water-closet system of the city, two thousand tons of fecal matter being daily removed from Paris.

Proprietors in France can at any time receive, by means of a Society in Paris, loans on two-thirds of the value of their property, at three and four per cent., repayable over a long series of years. In the centre of the Empire, as well as in other parts where the land is poor, the proprietor furnishes the dead stock for a farm, and divides the profits with his tenant. This is called the *metayer* system—somewhat analogous to what exists, as we shall see, in Russia, but in every way reprehensible. The tenant has no self-interest, no independence. It is an ingenious plan of "grinding" on both sides.

Since Napoleon's celebrated Decrees of Berlin in 1812, enforcing and encouraging its cultivation, so as to be independent of the English Colonies, the manufacture of beet-root sugar and brandy has made rapid strides in the western and north-western districts. Upwards of 200,000 tons of sugar alone are annually manufactured. Well, the Society of Pas-de-Calais will hold a show of beet-roots on the 9th of October next, to make known the best kinds of root to cultivate, the best manures, and the most suitable soils. Specimens of the worst, the average, and best roots are to be forwarded, with a careful history of the soil, the chemical manures employed, and the saccharine richness of the root.

Russia, it is rumored, will have an Agricultural Exhibition next year, open to all the world. Beasts, implements, &c., sent for show, will be bought in by the government at a price fixed on beforehand. All expenses of transit will be paid in advance. Odessa has recently had a trial of steam ploughs (English) and mowing machines (American), with the most happy results. Southern Russia, and its rich wheat land, cry aloud for cheap labor, where the population, already sparse, is reduced in its effects by the demands of the Greek Church, which, on an average, admits not more than twenty workable days per month. In France there are no vacations—from two o'clock on Sunday is the only holiday almost.

The Mormons have been making great efforts to induce emigration from the wine-growing districts of France, and with success; and California is now doing the same in the silk-growing districts. America is going in very heavily for wine and silk: Californian silk is at present being exhibited in Paris of an excellent quality, and cocoons are supplied to France from California (as Italy imports from Japan), and has proved the best remedy against the "disease."—What will France do when the Cape and Australia really bestir themselves?

Professor Cantoni, of Turin, is engaged in a series of interesting experiments—of which I shall duly inform you—of the relation between the temperature of the soil and the air; between the roots of a plant and its stem, especially as takes place during the process of irrigation. But these and other points I reserve for "continuation in our next."

In 1788 the area of the vineyards in France was 3,325,411 acres; at present there are 5,682,353. The mean average yield of wine is 308 gallons per acre, valued at one franc the gallon in the Bordeaux district; the yield is about one-third more, in monetary value, in Burgundy, and double in Champagne. The mean average produce of wheat is, per acre, 19 bushels; meslin, 22; rye, 18; barley, 24; maize, 19; buckwheat, 19; and oats, 30. Ploughmen receive 500 francs a year wages, with board, and laborers from one franc to two per day.

Horticulture has been truthfully described as the laboratory of the fields. In France, the garden does much for the farm in the way of experiment, in the testing new varieties of farm plants. Much preparation is being made by French horticulturists for the forthcoming Horticultural Show at St. Petersburg in May—on the fifteenth of that month, according to the Russian calendar. The Czar does everything on a grand scale, and the prizes to be awarded will be valuable. Every cheap facility will be afforded to exhibitors from all parts of the world, and the "exhibits" will be bought in. Hamburg opens its International Horticultural Show in Sept., and promises to be the first of its kind. A good practice is growing up in France, that of wealthy proprietors delivering gratuitous lectures on horticulture, and its various branches. Petroleum is largely employed to heat hot-house boilers, as well as coal gas, &c., and portable boilers, of an economical construction are generally preferred. A beautiful pelargonium has been brought out, called Madame Rouher, wife of the first Minister of the crown, to whom it has been dedicated. The new *Hydrangea Otaksa* is much sought after, it is very ornamental, pottable, and easily propagated. Plants raised in the open air, bear a brighter shade than those raised in a hot house. The name *Otaksa*, is taken from the daughter of the gentleman who introduced it from Japan. The peach trees in the vicinity of Paris, were very sickly during the past season—microscopical examinations showed, that the malady sprung from fungi. It is common in France for amateurs to make an exchange of roots and seeds, addresses of such shall be furnished from time to time. The rose and camelia "crops" never were so plentiful in Paris, and the violets are as abundant, and as welcome as the flowers of May.

EXTRA AWARDS AT PROVINCIAL EXHIBITION OF 1868.

Diplomas were awarded to the following:—

- Miners' and Fishermen's Boots, a very superior quality—the Truro Boot and Shoe Manufacturing Company.
- Tobacco (manufactured), some very fine specimens—J. B. Campbell & Co.
- Model of Turn-Table and Draw-Bridge—John Brookfield.
- Blasting Powder, 12 samples, very fine—Academy Powder Company.
- Ship's Winches—Dimock, Windsor.

Cordials, some very fine samples—J. Crosskill & Son.

Stencil Work—Knapen, Halifax.

Stove Pipe Fitting and Cutting Machine—J. T. McGee & Co., St. John, N. B.

Eccentric Lathe—Silas Bishop.

Iron Seythe Sniaths—Alex. Sutherland, Gairloch, Pictou Co.

Carriage Axles—the Starr Manufacturing Co., Halifax.

Ladies' Travelling Trunk—William Trider, Halifax.

Hoop Skirts—Harrold, Halifax.

Fancy Sign Painting, some beautiful specimens—Studley, Halifax.

Weaver's Reed (Henry Wier Creelman)—Dunlap, Stewincke.

Specimens of Dentistry—A. C. Cogswell.

Washing Machine—Everett, St. John, N. B.

Refrigerator—S. C. Nash, Halifax.

Fishing Rods—Hobson, Halifax.

Chemicals and Proprietary Articles—F. B. Woodill, Halifax.

Chilled Car Wheels—W. S. Symonds & Co., Halifax.

Patent Spring Awning—Alex. Robertson, Halifax.

Vault Lock—T. W. Bateman, Halifax.

Mill Machinery—T. Hodgson, River Philip.

Galvanized Iron—A. Robinson, Halifax.

Spinning Wheel, and Model of Wind-mill and Water Wheel—Freeman & Burgess, Cornwallis.

Mr. Thos. W. Davies—Minerals, extra prize \$20, with diploma.

W. H. Schofield—Manganese Ores, diploma.

David Dickson, St. Mary's—Salmon, diploma.

A. H. Crowe, Haddock, diploma.

Hamblin, Baker & Co.—Salmon in tins, diploma.

A. P. Christian—Lobsters in tins, diploma.

Crane & Falconer—tins Mackerel, diploma.

C. Katzer—Otter and Lamb Skins, diploma.

Mrs. Bourdillault & Co.—Boa Tippet, Sleigh Robe, and Muff, diploma.

Everett Bros.—Ladies' and Gents' Caps and Silk Hats, diploma.

Mattheson & Co.—Rotary Engine, diploma.

Bill & Skerry—Edge Tools, diploma.

B. Eaton—Edge Tools, diploma.

Thos. W. Cox—Horse Shoes, diploma.

Starr Manufacturing Co.—Cut Nails, diploma.

Richardson & Co., Worcester, Mass.—Buckeye Mowing Machine.

J. A. MacDonald, Shubenacadie—Hay-pitching Machine, \$5.

Miss E. Morris—Lace Handkerchief, extra prize, \$4.

Mrs. S. Boggs—Phantom Flowers, honourable mention.

A. & W. Mackinlay—School Apparatus, diploma.

C. E. Harris—Specimens of Staples' Writing Books, \$8 and diploma.

Carrie R. Morrison, Guysboro'—Writing Specimens, \$2 and diploma.

Muir & Co.—Blank Account Books, diploma.

G. & T. Philips—Book-binding, diploma.

A. & W. Mackinlay—Best Printed and Bound Books, diploma.

H. Fitzmaurice—Rob Roy Canoe, diploma.

Malcom & Johnston—Chimney Tops, diploma.

Francis S. McKenna—Model of Stair-case, diploma.

R. & J. Wetmore—Dressing Glass Frames and Capitals, diploma.

Moir & Co.—Corn Meal, prize \$4.

Moir & Co.—Vinegar, honourable mention.

J. P. Mott—Spices, Chocolate, and Candles, honourable mention.

F. B. Woodill—German Baking Powder, honourable mention.

M. F. Eager—Toilet Articles, Drugs and Dyes, honourable mention.

J. H. Woolrich—Bitters, Horse and Cattle Spices, honourable mention.

Herberts—Blackening and Inks, honourable mention.

Charles B. Flynn—Brushes assorted, diploma.

C. & W. Anderson—Roasted and Ground Coffee, honourable mention.

J. Knight—Packing Cases for Glassware, honourable mention.

R. A. Brehm—Soap and Candles, honourable mention.

D. Ellis & Co.—Home-made Bread and Rolls, honourable mention.

Bartholemew Walsh—Prime Pork, diploma.

A. Mulvena—Paste and Liquid Blacking, honourable mention.

R. Trotter & Co., Antigonish—Cotton and Wool Cloth, honourable mention.

Albert McCurdy—Home-made Wool Carpet, honourable mention.

Mrs. A. Young, Wolfville—Woollen Hearth Rug, \$2.50.

Mrs. D. Cox, Canning—Woollen Hearth Rug, \$2.50.

Mrs. Wm. Johnstone—Woollen Hearth Rug, \$2.50.

Mrs. D. Graham, Antigonish—Woollen Hearth Rug, \$2.50.

Sergt. Gall, 47th Regiment—Patch-work Quilt, money prize \$4.

Edward Curry, Windsor—Carriage Spokes, diploma.

J. M. DeWolfe—Barouche, prize \$20, and diploma.

M. J. O'Brien & Co.—Brougham and Buggy, Tea Cart or Sporting Phaeton, prize \$20, and diploma.

H. Crosskill—Dried Leaves, diploma.

T. A. Moren, Jr.—Moose and Cariboo Heads, diploma.

Croquet Set, diploma—H. O. & W. Scranton, Cambridge, Mass.

Embroidery, \$4—Mrs. Ryan.

Carving in Wood—Miss Allison, \$4.

The Farm.

THE BUTTER COW OF WINDSOR.

It hath been said by some political economist addicted to canine rhymes, that

"The proper value of a thing
Is just the money it will bring."

And on the same practical principle cow-keepers say—

"The proper value of a critt'r
Is just the gross weight of her butt'r."

We frequently read of wonderful cows that supply pails of milk, we forget how many, at each milking, but we do not pay much attention to them because the real test of the value of a cow is not the amount of salt water she drinks and the quantity of poor milk she gives, otherwise the prize for the best cow might well be voted to the City Waterworks. The real value of a cow's milk depends upon its richness in cream and consequent capability of yielding butter.

A few years ago we published the results of the yield of butter by a cow belonging to Edward O'Brien, Esq., of Windsor, which excited some interest among our farmers. Through the kindness of Joseph J. Northup, Esq., we have now the pleasure of furnishing a continuation of extracts from the Dairy Book of the Great Butter Cow. These are fully authenticated, and may be depended upon as strictly accurate. The

cow is in excellent health and fine condition, and her yield of butter for the past year, taken in connection with the extraordinary yield of former years, and her present healthy condition without any forcing food, must appear remarkable to everyone who is acquainted with dairy management.

Cow calved on 2nd of April, 1868.

BUTTER MADE:

	lbs.	ozs.
April (calf on cow all this month)	8	10
May	37	6
June	46	5
July	37	10
August	30	5
September	43	14
October	40	5
November	21	15
December	19	13
January 25	16	14
	303	1

Thus the cow, in 293 days, fed a calf and yielded 303 lbs. 1 oz. of butter.

The butter is of excellent quality. If the thousands of cows which we have in the Province all yielded over a pound of butter a day throughout the year, like this one, our farmers would be all rich men, and would walk into Government House in broadcloth, instead of homespun. "Honour to whom honour is due;" despise not the cow.

"CLIMAX"—A NEW SEEDLING POTATO.

During the fall of 1864 I first sent out the New Seedling Potatoes, the Early Goodrich, Calico, and Gleason; and in the following spring I first introduced the Harrison. These were all originated by the late Rev. Chauncey E. Goodrich, though first disseminated by the writer; and they were supplied by him to the Board of Agriculture of Nova Scotia, and are now in extensive cultivation in the Province.

In the fall of 1867 it was my privilege to be the first to send out the Early Rose, a seedling of great promise that originated with Alfred Bresee, of Vermont.

I have now a seedling of my own, that is five years old, and that appears thus far so highly promising that I am induced to dispose of a small quantity of it for trial.

Thinking my seedling combines rather more good qualities than any other Potato with which I am acquainted, I propose to name it CLIMAX.

The Climax is a seedling of the Early Goodrich, and originated with the writer in 1864.

It has a stout erect stalk, of full medium height, internodes of medium length, and very large leaves; the tuber is above medium in size, quite smooth, in form of a short cylinder swelled out at the centre, occasionally slightly flattened, and terminating rather abruptly; eyes shall

low, sharp, sometimes swelled out or projecting, and always strongly defined; skin medium thickness, considerably netted or russet, tough, white; flesh entirely white, solid, heavy, brittle, and never hollow, and it boils through quickly, with no hard core at centre nor stem; is mealy, of floury whiteness, and of superior table quality.

In productiveness it is fully equal, if not superior, to either the Early Rose or the Early Goodrich; bears few small tubers; matures nearly with the Early Rose; while its keeping qualities are as good as the Peachblow.

During the heated term of July and August last, the foliage of the Early Goodrich, which was planted by the side of the Climax, burned badly, the leaves of the Early Rose slightly, while the leaves of this seedling were unaffected. This property must highly commend this variety for southern planting.

What I said of the Early Rose in the *American Journal of Horticulture*, March, 1868, after another year's trial, I can now conscientiously apply to the Climax, viz.: that *I esteem it, all things considered, the most promising Early Potato with which I am acquainted.*

D. S. HEFFRON.

LAVENDER KIDS.

A COLUMN FOR FASHIONABLE YOUNG MEN.

We earnestly commend the following to the attention of the young gentlemen who may be seen at the street corners languishing for want of a little healthy exercise:—

The Paris correspondent of "Land and Water," writes that, "M. Emile Lavelleye has just contributed an article to the *Revue de Deux Mondes*, in which an interesting account is given of the progress made by Prussia during fifty years of peace. He points out that nearly all the land owners cultivate their own estates; except detached portions, renting is the exception. They are, therefore retained in the country by the care of their own interest, for nothing more imperiously requires the eye of a master than rural industry. It is true they are aided by a class of *employees* who are not found in any other country. These are educated young men belonging to families in a good position, often just leaving an agricultural college, who remain for a certain time on some large estate to initiate themselves in the practical direction of one of their own. This novitiate is an ancient custom still preserved in many trades. Thus, frequently the son of a rich hotel-keeper will not hesitate to enter another hotel as butler or waiter (*Kellner*) to be initiated in all the details of the service over which he will one day have to preside. When any one visits the farms

(*Rittergutter*) he is astonished to see as superintendents the son of a banker, a baron, or rich land owner. These young people drive a cart or guide a plough. At noon they return, groom their horses, and then go and dress themselves and dine at the owner's table, to whom they are not inferior, either in instruction, birth, or manners. After their meal they resume their working dress, and return without any false shame, to their rustic occupation. Thus we find in feudal Prussia a trait of manners suited to the democratic society of the United States, and which hereafter will become general. In France, in England especially, a young man of the upper class would believe his dignity compromised in performing the work of the farm laborer.

A MODEL SOCIETY AND A MODEL SECRETARY.

Yarmouth has the strongest and most energetic Agricultural Society in the Province. Is it because the soil of Yarmouth is superior to that of any other, or that the climate is milder—that there is more black mud, or a wider extent of marsh? There must be some good reason for the Yarmouth Society outstripping all the others. We think that most of our readers will discover the reason if they will read the subjoined letter. If Secretaries everywhere will act upon its advice, as given by example rather than by precept, we shall have heard the last of complaints about the difficulty of keeping up Societies:—

YARMOUTH, Jan. 10, 1869.

You will observe that I have fulfilled my engagement that our subscription list for 1868 should exceed that for 1867, both in numbers and in amount. I will undertake as much for 1869, although I am convinced that the task would be far less difficult had my suggestion been approved of—to offer three bonuses, of \$500, \$300 and \$200 to the three Societies who should raise most money and employ their funds most actively in 1869. Every little settlement in the Province can raise funds to build a place of worship; every county contains dozens, some hundreds of such; nearly every section in the Province has within a very few years each spent hundreds or thousands of dollars for school purposes,—and yet no County raises more than say five hundred dollars for all the departments of Agriculture, not enough to buy one decent stud horse. Once started, I am persuaded there would be no retrogression; a single year of liberal donations and judicious investment of funds, with the results that would flow therefrom, would end forever the niggardly one dollar subscriptions.

All nature inculcates liberality: the

bounteous soil, for the one grain sown, yields a hundred or a thousand fold: but man, and especially the farmer's man, but slowly learns the lesson, that to reap largely he must sow largely.

At our annual meeting yesterday I was partially successful in persuading to a little more liberality, and shall persevere to the end of this year, at all events, after which, like our Great Commoner, I may give it up, although I am more likely to stick to it. C. E. B.

SPECIAL FROM OUR EDINBURGH CORRESPONDENT—THE CHRISTMAS CLUB.

EDINBURGH, Dec., 1868.

The show in connection with the above named young and flourishing society, was held in the "New Agricultural Hall,"—a building twice the size of the Halifax Drill Room—and well adapted for the purpose of holding a cattle show. In the interior were erected a row of stalls around the walls, which were covered with strong planking, thus forming a fine gallery for the display of poultry and roots; also, from which, a fine view of the whole affair could be had. The centre of the building was divided into two divisions each containing a double row of stalls. The greater part of the centre stalls were occupied by the oxen, upwards of a hundred in number, and divided into the following classes—polled, short horned, highland, and cross. In the last named class, the animals stabled were very fine, especially those entered for competition for the Challenge Cup. The animal to which it was awarded was a fine example of the conditions required, namely size and symmetry, the broad and massive frame being well and evenly covered with the best of fat. It was very amusing to hear the remarks made by the spectators on this animal: one old lady in particular was loud in her expressions of pity, which she gave vent to in the following words, "puir beastie, I'm sure he canna feel richt." In the class for heifers, there were some really fine animals—that which carried off the first prize, was perfect in every respect. Cows were divided into three classes—short-horn, cross, and dairy, and consisted of twenty-five in number—the most exciting competition being in the class for dairy cows, and being confined to dairymen; and here the old truism,—“That every one thinks his own cow the fairest,” was verified to the letter, for a constant disputing was kept up by the owners, regarding the decision of the judges. This is too often the case, both at horticultural and agricultural shows, and goes far to retard the advancement of any society. The prizes offered for sheep brought out a good number of competitors—the number of animals stabled consisting of about five hundred—

which, with one or two exceptions, were perfection. The pigs, though limited in number, were first class in quality. But the show of poultry was the crowning feature of the Exhibition. Of the four hundred coops arranged in the gallery, there was every thing to please even the most exacting connoisseur in such matters,—all classes were well represented, from the tiny Bantam, to the stately Shanghai. Geese and Turkeys in particular were fine,—I have never seen their equal in any place, for size—not like those that you purchase in the Halifax market more bone than anything else. I wonder that the farmers of Nova Scotia do not import a few such birds, I am sure it would pay them, not to speak of the many other benefits they would derive therefrom. The show of roots consisted of cabbage, turnips, carrots, potatoes, mangel wurtzel, and kohlrabi, but there was nothing very striking except some fine Swedes which were taken from the field, to which the prize cup was awarded: “for the finest field of Swede turnips in all Scotland” they were perfect beauties, smooth skinned, symmetrical, and I have never seen them equalled for size,—the name of the variety is, Drummond's improved Swede. I have seen better cabbages, potatoes, mangolds, and kohlrabi, at the exhibitions held under the auspices of the Horticultural Society at the Skating Rink, and I think Nova Scotia would compete favorably in the matter of roots, at the Christmas shows held at London, Birmingham, and Edinburgh; any roots that have been sent formerly to Britain, have been taken up before attaining their maturity, in order to be in time for the shows held there—but by exhibiting at the Christmas Shows, such a difficulty would be overcome, and by making a creditable display, the advantages of Nova Scotia as an agricultural country, would be brought to the notice of the intelligent class of farmers that frequent such shows.

The show continued open for two days, and during that time was well patronised. The arrangements were excellent, every attention having been given, in order to furnish the public with information regarding the show and subjects exhibited.

It is the intention of the Highland and Agricultural Society to hold a show next year, when prizes will be offered to the amount of £1,500 sig. It is time the farmers of Nova Scotia were bestirring themselves for although they have made a great stride of late, still much is to be done, and I am satisfied from what I have seen since my sojourn here, that with such fine farming counties as Hants, Kings, and Annapolis, the Nova Scotian farmer, with a little encouragement and application, would not be a whit behind his brethren in old Scotia.

Yours, &c.

A. HALIGONIAN.

EXHIBITION AND FAIR AT NEW ANNAN.

NEW ANNAN, Dec. 28, 1868.

I have to report, for the information of the Board of Agriculture, that the Annual Meeting of this Society was held in Wilson's School-house, on the first Tuesday of December, when the officers gave in their report of the proceedings of the Society during the year, the same being adopted by the meeting. The following persons were then appointed office bearers for the ensuing year:—*Pres.*, Andrew Warwick; *Treas.*, Wm. Byers; *Sec'y.*, Wm. Creighton; *Directors*, Wm. Kirk, David Chalmers, Daniel Fields, Wm. Geddes, Robert Wilson.

This Society, at their semi-annual meeting, agreed to give prizes on young Stock, with a view to bring out the Stock of the imported animals.

An Exhibition was held on the 21st of October, in connection with our Annual Fair, when prizes were awarded on the following:—

Best 1-year old Bull, \$1.50—Andw. Warwick.
2nd do., \$1—Wm. Aitchison.
Best 1-year old Heifer, \$1.50—John Porteous.
2nd do., \$1—Wm. Geddes.
3rd do., 75c.—George Vincent.
Best bull Calf, \$1.50—Daniel Fields.
2nd do., \$1—Alex. Duncan.
Best heifer Calf, \$1.50—Wm. Warwick.
2nd do., \$1—John Swan.
3rd do., 75c.—Alex. Duncan.
Best 1-year old Ram (Leicester), \$1—William Aitchison.
2nd do., 75c.—Philip Vincent.
Best 1-year old Ewe (Leicester), \$1—John Johnston.
2nd do., 75c.—David Chalmers.
Best ram Lamb (South Down), \$1—Isaac Reid.
2nd do., 75c.—Isaac Reid.
Best ewe Lamb (South Down), \$1—John McLellan.
2nd do., 75c.—Robert Wilson.
Best ram Lamb (Leicester), \$1—David Chalmers.
2nd do., 75c.—David Chalmers.
Best ewe Lamb (Leicester), \$1—Wm. Creighton.
2nd do., 75c.—Wm. Creighton.
Best ewe Lamb of any breed, \$1—John Porteous.
2nd do., 75c.—John Swan.

We had the misfortune of losing our South Down Ram, which is the second of the stock purchased at Richmond.

In reference to the crops in this district, we have to report—hay, a good crop: wheat, a light crop; oats, a light crop—injured by rust; huckwheat, an average crop.

WM. CREIGHTON, Sec'y.

RELATIVE VALUES OF A MAN AND A COW.

The Laws of the Breits and Scots, partly incorporated into the early law book of Scotland—the “*Reginum Majestatem*”—specially deal with pecuniary retribution for slaughter or personal injury. The “kro,” or estimate of the absolute value of the person, is fixed according to rank, so that the damage to be paid for any injury inflicted on a person in any of the grades shall bear the same proportion to the damage for the same in-

jury inflicted on a person of any other grade which the "kro," or total value of the one, bears to that of the other. The King's value was a thousand cows; the value of a King's son or Earl was 150 cows; the son of a comes or thane, 100 cows. The ogtiern—supposed to express the rank held by the fourth in descent from a Thane—is valued at 44 cows, with 21 denarii and 2 parts of a denarius. In these degenerate days we have "advanced into darkness" in the law of values. Life Assurance Companies "take men at their own estimate;" and in determining the value of personal damages by railway accidents there is often much needless litigation, which a simple revival of the forgotten Laws of the Brets and Scots would set at rest.

SHEEP AND DOGS.

A correspondent of the *Toronto Globe* thus discourses on the Sheep and Dog question;—

"The dog tax in our township has been equivalent to the damage done. The old saying "the hair of the same dog will cure the wound," is *apropos*. The owners of dogs should pay for the mischief they do.

Those people who have a *penchant* for dogs, most likely will pray for the abolition of the present law. But we would just here enquire who are, or would be, the greatest dog proprietors. An acquaintance of ours once remarked that every poor man has one or two dogs, and every very poor man has three or four, apparently carrying out the suggestion of the far-famed Josh Billings that all the profit there was in keeping two dogs was what could be saved on the second dog's board.

"Now, Mr. Editor, it appears to us that that the repeal of the dog tax, as the abolitionists would have it, will be to encourage the propagation of the canine race, and thereby endanger the safety of our sheep. And when we take into consideration the prospect of more hydrophobia and the destruction of human life thereby, we think our legislators ought to pause before making a total abolition of the law. Surely one man's life is worth how many dogs! Let any sane man answer this question. Yet we frequently hear of deaths from this source—hydrophobia."

KEEPING STOCK IN A SOCIETY.

DIGBY, Dec. 24, 1868.

Will you please, in some future number of the *Journal of Agriculture*, give your opinion as to the best way of keeping stock in a Society so as to make it the most profitable to the Society and useful to its members?

A few remarks from you on this subject might be beneficial to us, and perhaps to other Societies working under the Central Board.

JAMES M. AYMAR,
Sec'y Digby Co. Agrl. Soc'y.

[The experience of our correspondent is no doubt that of the Secretaries of most Societies, that in keeping stock in a Society it is impossible to secure the best results, and, at the same time, please everybody. Various plans are adopted in different districts, and the details of these may be gleaned by a careful reading of the reports of the various Agricultural Societies in the present, past, and future numbers of this journal. In regard to Bulls, some Societies have found it to be the most profitable plan to rent out the animal for the season to a member, and let him make what he can, the fees charged from fellow members being limited to a certain figure. Where Societies do not charge their members any fee, it will be necessary to pay for the keep of the animal out of the Society's funds, as well as for necessary attendance. The best plan of all, in most places, is to sell the animal to a member, under the restriction that it is not to go out of the district for a certain number of years. Whatever method be adopted, one vital point is to see that the animal goes into the hands of some one who will take a pride in feeding him and keeping him in good healthy condition, and in comfortable quarters. In regard to Rams, there is practically much greater difficulty, and many valuable animals are lost every season by handing them about from one farmer to another. We think that, as a rule, Rams should not be kept by a Society, but at once sold to members, to be kept in the district. Rams sold in a Society in this way, the members may exchange, the one with the other, after having had use of them for a year or two. Every Society should adopt a plan suited to its peculiar circumstances, and which will give satisfaction to as large a number of members as possible. As for a "way of keeping stock in a Society" without any jarring or dissatisfaction, we have never heard of such a way, and think it useless to expect one until the human stock is considerably improved beyond its present condition.—Ed. J. A.]

THE NEW POTATO DISEASE.

As if the "old fashioned potato rot" were not enough for our farmers, a new Potato Disease has arisen. It has spread over the length and breadth of the American Union, north, south, east, and west, and has at last we hear planted its foot on Nova Scotian soil. It is said, indeed, that the Board of Agriculture imported it three years ago from Utica. It is called the POTATO FEVER. Its great peculiarity is that it attacks not the tuber

itself, but the man who grows it. Like other fevers, it quickens his pulse and fills his mind with exciting dreams. But the Potato fever, like the Hen fever, can do nothing but good to the public, for it will serve to bring men's minds and strong arms to bear upon a branch of agriculture worthy of the greatest effort of every farmer. It may be that exorbitant prices will be paid for new sorts of potatoes, and that some of these will turn out to be perfectly worthless, but even so, one could buy a dozen of kinds, and of one of these there is a decided improvement, the increased yield or improved quality of that one may amply repay even a very high price.

Of the new sorts brought out by the present eruptive fever, the Early Rose Potato is by far the most conspicuous. It appears to be the very best potato that has ever been produced, and we know that it will have a fair trial in the hands of competent cultivators in Nova Scotia during the ensuing season. One advertiser thus speaks of it:—

"Among the many thousands of our patrons to whom we furnished this valuable Potato last spring, we have yet to hear from the first one that is not fully satisfied with his purchase. The only regret expressed is that they had not procured more. We are daily in receipt of the most flattering testimonials, not only of its earliness and good quality, but of its astonishing productiveness, some of which seem almost fabulous. Several report of having grown a barrel from a single pound; a yield of one hundred fold is an every day occurrence. The following well-known gentlemen have given it their unqualified approval, and endorse it as the best, most productive, and earliest variety in cultivation: Hon. Marshall P. Wilder, Charles Downing, Esq., Rev. Henry Ward Beecher, Fearing Burr, Esq., Dr. J. G. Holland, (Timothy Titcomb) and many other prominent agriculturists, horticulturists, and market gardeners. The early rose sells at \$50 per barrel.

Another sort is BREESE'S PROLIFIC (or No. 2.)

"This remarkable variety originated with Albert Breeze, Esq., of Hubbardton, Vermont, who was also the originator of the justly celebrated *Early Rose*, both varieties being from the same seed-ball of the Garnet Chili.

"The vines of *Breeze's Prolific* are of medium height, quite bushy, somewhat spreading large leaves, have produced no seed-balls. Tubers large, regular in shape, and very smooth, slightly oblong, somewhat flattened. Skin, dull white, inclined to be russeted; eyes but little depressed and slightly pinkish; flesh white; cooks quickly, is very mealy, and of excellent quality, yield very large, often exceeding one hundred fold, matures about three weeks later than the *Early Rose*, and will prove a most valuable variety for field culture. A Silver medal was awarded to this variety at the annual exhibition of the Mass. Hor. Society last September.

TO PURIFY LARD FROM SALT, which it often contains, and which is sometimes added to increase its weight, it is only necessary to melt it with two or three times its weight of boiling water, and when still in a liquid state, agitate it well and set it aside to cool. When lard is wanted for ointments or pomades, it is always desirable to free it from all traces of salt,

The Garden.

THE GOLDEN CHAMPION GRAPE.

The Golden Champion Grape Vine is so highly spoken of in all the English horticultural journals, that we think it well to call attention to its reputed merits. We understand that W. Cunard, Esq., of this city, has planted one of his new Vineries with this valuable new variety; and any one establishing a Vinery cannot do better than secure a few plants along with some of the old standard sorts. Of course it will not do in the open air with us. Like thoroughbred live stock, it will require a comfortable house and plenty of food. The following account is extracted from the *Florist and Pomologist* :—

"It is not only a decided novelty, but a novelty of the very highest excellence. Free and robust in growth, hardy and prolific in habit, magnificent both in berry and in cluster, and exquisite in flavour, what more can be desired? In truth, its merits are of so high an order that they leave little to be wished for.

"The bunch of the Golden Champion is moderately large, compactly-shouldered, and somewhat tapered, with a stout fleshy stalk. The berries are very large, with stout warted foot-stalks, some 2 inches long, and 3½ inches in circumference; they are generally of an ovate shape, but occasionally somewhat roundish, and they have a thin, pale yellowish-green skin, which acquires a rich golden amber tinge with a slight bloom when they are fully ripe. The flesh is tolerably firm, but tender, with few seeds, very rich and juicy, with a flavour which, though compared with that of the Black Hamburgh, is, to our taste, much more saccharine and luscious than that variety, even when grown on the same stock.

"This new Grape supplies, as far as can at present be judged of it, a long-felt desideratum—namely, a high-class free-growing white grape, of hardy constitution, suitable for general cultivation as a companion to that best of all Grapes for general purposes, the Black Hamburgh. It was raised by Mr. W. Thomson, of Dalkeith, some five years since, from a seed taken from a Grape that was itself a cross between the Champion Hamburgh and the Bowood Muscat, and has been freely exhibited during the present year, when, among other awards, it has received a first-class certificate from the Fruit Committee at South Kensington. The foliage is very slightly lobed, and deeply and sharply serrated."

We have no doubt Mr. Harris, of the Halifax Nurseries, will soon be able to supply young vines of this sort, as he has a keen eye to meritorious novelties.

CANNAS IN THE OPEN GARDEN.

The *Canna coccinea*, or "Indian Shot," is one of the oldest inhabitants of the Plant Stove or House devoted to Tropical Exotics. It was to be seen in every Botanic and Private Garden, petted and coddled as if it were too tender for the sun to shine or wind to blow upon. We recollect when *Diehlytra spectabilis*, the "Chinaman's Breeches," which is one of the hardiest plants on the face of the earth, was treated in a similar manner; and eighty years ago (which we do not remember) English Greenhouses gave shelter to Larch trees, which now grow as robustly on the promontories of Cape Breton as the native Spruces. It appears now that Cannas may be treated like Dahlias; our summers are hot enough for them, and the roots may be stored away in a cellar in winter. Last summer, in passing along Lockman street, we noticed in one of the front plots a fine large *Canna*, which seemed to enjoy its quarters and treatment. M. Sisley, of Lyons, France, in a communication to the *American Agriculturist* for the present month (February) expresses his surprise at the neglect of the noble Cannas in America, and recommends their general culture. There are now many species and varieties, differing much in height, and in form and colour, both of foliage and flowers. In foliage they rival the lily of the Nile, and their flowers vie with those of the *Gladiolus*.

AUCUBA JAPONICA.

As Wednesday being a College holiday, we strayed into the nurseries of Mr. Harris, Richmond Road, and there made the acquaintance of several new varieties of a plant of no ordinary interest. This is the *Aucuba Japonica*, known well enough in English Gardens, and to every English man, woman, and child, on account of its mottled leaves, as the Variegated Laurel. It is commonly known there also, by its Japanese name "Aucuba." It is a shrub with very large evergreen leaves of a bright shining green, mottled and blotched with yellowish white. It is one of the oldest "foliage plants" in existence, and its neat habit has rendered it a favorite in England, where it is commonly grown in front plots in the cities, as an "architectural plant" suitable for relieving the fronts of heavy stone buildings. Persons who have made pilgrimages to see the Duke of Wellington's London House, will recollect to have seen some fine plants of the *Aucuba* there. It was introduced into England from Japan so long ago as 1783 by Mr. John Graeffer, according to Aiton's "Hortus Kewensis," vol. V., second edition, page 257, where it is called the "Gold Plant." It is figured in *Bot. Mag.*, table 1197.

In England it flowers in early summer-time. It is described by Thunberg as growing commonly in Japan, both wild and cultivated, and of the height of a man, but it seldom attains that stature in England. In most botanical works to which we have referred (Persoon, London, Aiton, and many others) the *Aucuba* is described as monoecious, having male and female flowers on the same plant. That is not the case, and the only correct description which we have found is the one contained in the new "English Cyclopaedia," of which a complete set was recently presented to Dalhousie College Library, by Admiral Sir James Hope.

The most remarkable facts connected with the plant depend indeed upon its being dioecious, the male and female flowers being each produced by separate plants. For seventy years none but the female plant was known in Europe and America, and consequently no fruit or seeds were ever produced. After the female plant had been obtained, few opportunities occurred of obtaining access to Japan. At last, some twelve or fifteen years ago, a botanical collector (Mr. Robert Fortune, a personal friend of the writer of this notice,) bethought him of hunting up the long lost husband; he succeeded in his efforts, and now we see in Mr. Harris's nursery at the present moment the male plant in full blossom, with neat trusses of brownish purple flowers, each flower with four bright cream colored anthers; and the female plant with clusters of large red berries, the size of coffee beans. There are, likewise, various varieties showing differences in the blotching and spotting of the leaves. Mr. Harris has only now to raise a young progeny of seedlings from the seeds produced, to afford us a living illustration of one of the most interesting chapters in botanical history.

Most of the circumstances we have mentioned are from memory, and we have not works of reference sufficient to give a detailed history of the recently introduced varieties, nor can we state the precise year in which the male plant was first brought to Europe, and from thence to America. It ought to be described somewhere in the "Annales Botanices Systematicae" of Walpers, but strangely enough we have searched through the volumes of this work in vain.

The *Aucuba* like all broad leaved Evergreens is not hardy enough to stand the winter in the open air in Nova Scotia, but may be kept over winter in a cool green-house, or parlour window.

THE LATEST NOVELTY IN CLIMBERS.

Among the striking and "very" new plants recently exhibited at the Royal Horticultural Show at Leicester, was

Veitch's Virginian Creeper, a pretty, small-leaved kind, labelled *Ampelopsis Veitchii*, showing in its leafage a number of colours,—tints of blue, light green, and purplish red; what colour it will die of in autumn remains to be seen, but in its summer growing garb, it is quite a gem. This was exhibited climbing to a miniature wall, built up in the pot the plant was in, to accommodate its habit of clinging to a rough surface. The Common Virginian Creeper (of which the novelty is a variety), is the most commonly used and most ornamental creeper for houses and verandahs on this continent, and is quite hardy throughout the Dominion. If *A Veitchii* is equally hardy, it will soon be seen creeping up the front walls and fences of our rural homes. Hovey's Magazine thus writes of it:—"This is a miniature foliage variety of our Virginian creeper, which clings to any building with the tenacity of the strongest ivy, and, producing in great profusion its dense foliage of a glossy green shaded with purple, cannot fail to command great attention. It is of exceedingly rapid growth, and requires no nailing, and from earliest spring it produces its beautiful purple-tinted leaves so thickly as to form the most perfect coating wherever it is planted, the young shoots being quite purple. The leaves are sometimes divided into three parts, and are sometimes entire, turning red in autumn, similar to the old kind. It was introduced by Messrs. Veitch, and long received first class certificates and prizes at the great shows in London."

It is a pity that more use is not made of another beautiful creeper, which is easily got, viz., our Virginian Clematis, which is perfectly hardy, and so very beautiful both in summer and autumn, that it attracts the attention of all visitors to the Rifle Range at Bedford, where it is perfectly wild.—seeking to cover with its foliage and feathery festoons the naked stone walls about the camp.

The Orchard.

APPLE CULTURE.

The Fruit Growers' Association of Ontario offered a prize for the best Essay on the Cultivation of the Apple in that province, which has been published at length in the *Toronto Globe*, and from which we select a few of the more prominent practical hints.

In relation to the profitableness of an orchard, some editorial remarks in the *Canadian Farmer* will be found most conclusive. "Take a piece of ground containing 20 acres; it will require, to plant it 40 feet apart each way, 600 trees. These can be had of the best quality for \$20 per hundred. Planting say \$40, cost

of cultivation \$150 per annum, rent \$8 per acre. The expenses of the first year then will be \$470, for each succeeding year \$310. At the end of five years we will have expended \$1,710. The fruit will be worth the 6th and 7th years, 25 cents per tree, for each year, the 8th 50 cents, the 9th \$1, the 10th \$1.50, and the 11th \$2. This very moderate estimate will give at the end of the 11th year, cash received \$3,300, cash paid \$3,570, leaving a balance of \$270 against the orchard; another year's crop, or \$1,200 will cover this, and any unforeseen expenses." We have thus an investment which has not only paid itself at the end of 12 years, but has also given an annual rent of \$8 per acre. The article above quoted goes on to show, that not only will the orchard give after this a clear annual income of \$1,000, but also that there is no danger of depreciation in the value of apples, but a probability of its enhancement.

No one who gives attention to these candid calculations, can doubt that in a large portion of Ontario the elements of wealth are suffered to lie dormant.

The selection of a site will require the exercise of judgment. The best soil is a clay loam, with a warm not too tenacious subsoil, and good natural or artificial drainage. Other soils may be made to produce good results however, by proper management, enriching the sandy, and thoroughly working and draining the tenacious clayey soils. It should, if possible, be in such a position as to be free from all danger of being infested with insects from contiguous orchards. It is also desirable to have it well fenced, not only to keep excursive animals out, but also to be able to keep pigs, &c., in it, which are very useful in a large orchard.

The best exposure for tender sorts, and in the colder parts of the province, is undoubtedly the South, but in most localities any exposure will be found to answer, especially if a row of trees protect the orchard on the side from whence the prevailing cold winds come. The matter of protection is of more importance than is generally supposed, and will increase the value of an orchard 25 per cent.

It is an entire mistake for the general orchardist to plant a large number of different kinds; the amateur, the nursery man, the one for curiosity, the other for trade, may plant many varieties, but for profit, there is nothing like one or two leading kinds.

It is a very important point to get trees from a reliable party. The price is altogether a secondary matter. What sensible man would hesitate to give for first class trees, "true to name," 5 or even 10 cents more per tree than he would for trees which might turn out to be the finest of Newton Pippins, or with at least equal probability the most insipid of pumpkin sweets, or something worse; and I would

say, having dealt with both Canadian and American nurseries, I find the Canadian to be much the more reliable; among these may be mentioned, as leading and excellent establishments, the St. Catherine's, Toronto, Windsor, Hamilton, and Paris nurseries.

When the trees are received, if from any cause it is not wished to plant immediately, they may be heeled in, by simply digging a trench, laying them in in a sloping position, and covering the roots with earth.

Pruning, in order to become proficient in it, requires a good deal of practice, combined with close observation, but by careful attention to the ends sought to be attained, any one can achieve a gratifying amount of success in this, one of the most important, as it is the most neglected, of the duties of the orchardist.

Grafting succeeds best when done just before the leaves appear. The scions should be cut a month before using them, packed in damp moss, and laid in the cellar, or one end inserted in the ground about two inches.

Grafting wax is generally used, and may be made as follows:—Beeswax 3 parts, resin 4 parts, and lard 3 parts, these well mixed while warm. But grafting clay, when properly made, is fully equal to the wax, and is generally more easily prepared. It is made as follows:—Clay loam, 3 parts, fresh stable manure, 1 part, add a little salt to prevent it cracking, and mix it well a few days before using.

Whip grafting, which is commonly used on small stocks, is performed as follows: The stock is cut off at the place where it is desired to graft, then a clean slanting cut from one to two inches long made in an upward direction; a small cut should now be made downward in this cut so as to form a tongue in the centre of it, the scion should now be cut in the same manner, making the slanting cut if possible with one stroke of the knife; form the tongue so as to fit the other, then placing them so as to meet the bark exactly, tie them round (with bass strings or woollen yarn), and clay or wax them carefully over. On one side at least, the bark should meet nicely; they must be firmly tied, and every part of the wound covered with the mixture.

Cleft grafting (for larger stocks) is done by splitting the stock, inserting a scion at each side of the stock, and then waxing it over. The scions should be cut wedge shape, and a little thicker at the out edge.

It is best, in grafting trees, to graft one half one year, the other the next, thus avoiding the risk of destroying the tree in one year.

If the grower carefully harvested and marketed his apples, and considered that the interests of the public were identical with his own, not only would he save a

large sum of money, but would escape the annoyance which many of the farmers have to undergo in getting clear of their bruised fruit. Some remarks by a correspondent of the "Country Gentleman" on picking and storing are excellent. He says:

"What I wish to say to farmers is, *pick your apples*; if they are worth gathering at all they are worth picking. Apples ought to be handled as carefully as eggs, for if an apple is bruised, it is spoiled for long keeping.

"To pick apples you need some light ladders, and a basket or bag slung conveniently by your side; when the basket is full, do not pour them from the top of the barrel, as you would a basket of potatoes, but lower them down and empty them carefully in. When the barrels are full, if they are to be headed up, there should be some holes to admit air. They should be stored in sheds or other airy places until there is danger of their being frozen, then they should be taken to the cellar, which should be cool, airy, frost proof, and dark."

In spring the market is generally better than in the fall; by this means they can be kept safely until then.

It is believed that it will pay to assort all apples intended for market. Not only is this a more honest plan than mixing good and bad together, but it has been found that the cash returns are better when the apples are thus put in two classes; it is found thus to be the best for both buyer and seller. Bags should not be used for taking fruit to market. Barrels may be used, and should be shaken gently as the fruit is being packed, and headed up tight enough to keep the contents from shaking.

In addition to what is mentioned under the preceding heads, it may be stated that after 5 years of cultivation, the orchard may be seeded down and mowed, if care be taken to return sufficient manure to the soil. It is an excellent plan to keep a herd of pigs in the orchard, for they not only manure the land, but they pick up and eat all half formed fruit and wormy specimens as they fall to the ground, which otherwise would have to be done by hand, for, if allowed to lie, the worms would soon increase to a large extent.

The orchard, so long as the trees seem in a vigorous growing state, may be left seeded down, which will save trouble; but any appearance of loss of vigor should be promptly met by more manure or breaking up, as the case may require.

The trees should be washed every year (twice a year is better, spring and fall,) with some alkaline fluid: weak lye, soft soap, (2 or 3 quarts to a pail of water), and soda (1 lb to a gallon of rain water), are all good for this purpose: the last is the best.

All suckers should be carefully remo-

ved. It will sometimes be necessary to remove the earth from the roots in order to do this effectually; it is said that if they are broken off they are less liable to sprout again than when cut.

I would express a wish that all who are intending to enter, or who are already within, the fascinating domain of horticulture, would remember, and remembering act upon the adage which says, "What is worth doing at all is worth doing well."

Poultry Yard.

HOW WE KEEP OUR HENS.

We keep about fifty hens and four cocks. Our hen-house is twenty feet long, ten feet broad, and ten feet high in front, with sloping roof, two windows on the west, and one long window on the south, across the whole end, swinging inward. Under the front windows are the boxes for the nests, made as seclusive as they can be, for a hen is as shy and retiring before she lays as she is bold and noisy after. Under the roosts, a shelf catches the droppings. These are gathered every few days, and saved for the garden, and the shelf each time covered with lime and ashes. We whitewash inside and outside. On the south side of the house a yard is fenced in under apple trees, twenty by fifty feet. The earth at the bottom of the house, when frozen, is swept every day, and at other times is shoveled out often and renewed with fresh earth. A large box with fine coal ashes or wood ashes, is placed in the corner for a bath and often renewed. No food is given in the house that can sour the ground, and when such is given in the yard, like scraps from the kitchen, the earth is often taken out and renewed. A lime or oil wash is occasionally used on the roosts. The house is shut pretty closely on very cold nights, (always the passage way into the yard open,) but is often open and ventilated. In weather not too cold the windows are left up and the doors open, and the fowls are encouraged to roam from their home about the place, but this, in even moderately cold weather they are always reluctant to do, and invariably go back to their house in a few minutes, or huddle together in some warm, sunny place in a shed. There is nothing fowls like better in cold weather, than a sheltered place, where they can have a sun bath, and even in summer they seem to take great delight in wallowing in a sand bank under a blazing sun. We give them plenty of fresh water and pure food.

Now there is nothing peculiar about this manner of treatment, into which, from habit, we have settled, except its results. We have lost one hen, found dead in the yard, without apparent cause, but proba-

bly from apoplexy, to which they are subject, and otherwise than this we have not had a sick fowl in our whole flock from any cause during the fall and winter. The simplest medicines work the most wonderful cures, and we have always thought the most simple treatment of fowls the most profitable and successful, and we have had all kinds of experiments in the matter, no, omitting the most expensive and profitless.—*Co. Gent.*

Reports of Agri. Societies.

BARRINGTON AGRICULTURAL SOCIETY.

In conformity with suggestions made at the last Annual Meeting, a quantity of various kinds of Seeds for sowing, a quantity of Potatoes for seed, and a number of root-grafted Apple Trees, were obtained early last Spring, all of which were distributed among the members. Some farming tools were purchased, and sold in the Society. One large plough has been purchased this Fall, to be owned by the Society, and for the use of members. The Directors were of opinion that it would be more advantageous to the Society to sell the Bull, as the charge for taking care of him during the winter would be large, and add to the expenses of the Society. The Bull being of no benefit during the winter, consequently he was disposed of at public auction.

There are at present sixty members, and it is believed all have reaped decided benefit by their connection with the Society. The Treasurer will submit to you the financial state of the Society, which will show quite a balance on hand—\$145.73.

Fall Exhibitions have been recommended from time to time, but have failed heretofore, but the Directors would suggest the propriety of making arrangements the coming Spring, that members may be prepared in the Fall to exhibit such articles as may be decided on.

The Directors would recommend the purchase of a Bull the coming year, and Garden and Grass Seeds.

O. H. HOMER, *Pres.*

R. H. CROWELL, *Sec'y.*

MAHONE BAY AGRICULTURAL SOCIETY.

In making the report, the office-bearers regret that they do not see the members taking the interest in the Society which they ought to take for the promotion of agriculture. There are inducements held out to encourage the agriculturist to press on and make improvements, but the members do not improve upon the oppor-

tunity. Two years ago, the Society passed a resolution to purchase some lambs that were to be sold by the Western Halifax Agricultural Society, and the President offered to go to the sale and accordingly bought five lambs, they were duly advertized, but few of the members attended the sale, and those that did attend did not seem to think that the lambs were any better than their own common breed, and the prices they brought proved it, although they proved to be a very great improvement to their present stock. One yearling ram sheared nine and one-half pounds of wool, although they appeared small, yet they proved very heavy. One of the rams was not very prolific, and he was altered and turned into mutton, and his weight was over eighty pounds. The Bull, bought at Windsor last year, you are aware, was hurt, and not fit for service, he was sold and another was bought at the Exhibition, which took the first prize as a calf; and they can not help expressing a regret that there was nothing seen to the Exhibition by any of the Society, to compete for a prize. The officers are sorry they cannot report favorably of the crops; the potatoes are somewhat better than last year and grain also, but upon the whole a failure; root crops and cabbage are very good; the hay is very scarce, an average crop.

At the annual meeting, on December the first, the following officers were chosen:—*Pres.*, B. Zwicker; *Vice Pres.*, William Kidy; *Treas.*, Joseph Zwicker; *Sec'y.*, George Duncan; *Directors.*, Jacob Earnest, Joseph Mader, Edward James, and David Earnest. Balance in Treasurer's hands, \$25.

B. ZWICKER, *Pres.*
GEO. DUNCAN, *Secy.*

MILFORD HAVEN AGRICULTURAL SOCIETY.

The Society imported last Spring 152 bushels of best black Seed Oats (bought by weight, 36 lbs. to the bushel) from Prince Edward Island.

Seed Potatoes being very scarce, they also imported from the same place 122½ bushels of best Seed Potatoes.

The above seeds were divided among the members as equally as we could divide them, at a discount from cost, and charges of 55 per cent. at three months credit; and at a further discount of 6 per cent. to those who paid down. We regret that, through not having proper facilities to weigh the oats out again to the members, it fell short about 10 bushels.

We hope that by means of the above seeds the produce of this part of the County has been in some small measure improved.

Our best Ram having died this Fall, and another being sick, added to the in-

crease in members of this year and the last, compelled us to purchase three more Rams for the use of the Society.

We are thankful to have it to state that with the exception of hay, all the crops are better in this part of the County this year than last; but owing to the scarcity of seed last Spring, and the failure of the fisheries the past season, it is to be feared there will be great desolation, especially among the fishermen.

Owing to the fact that we sold the seed mostly on credit, we were obliged to borrow sixty dollars for six months, at 7 per cent., as we could not get the money on any better terms.

The accounts will show how we have expended our funds. Balance against the Society, \$21.96.

Alterations and additions to bye-laws.—The last clause of section 9 of bye-laws, which states that all alterations or amendments to be made (in such bye-laws) shall be delivered to the Secretary, in writing, at least one month before such general meeting, to be by him copied into each notice of the annual general meeting next succeeding—to be struck out.

The following to be added to the bye-laws:—

Rule.—That hereafter this Society shall be worked and managed by the officers and directors meeting, instead of the members as heretofore, and that no meeting of the members be called except the annual or adjourned annual meeting, unless by the order of the board of officers and directors at one of their meetings.

Rule.—That for the more perfect governing of this Society, according to the understood wishes of the members thereof, the Society shall hereafter be considered as composed of three different districts, and known as districts 1, 2 and 3.—District 1 to include all members in the Intervale poor district, as now existing. District 2 to include all members on the Guysborough side of Milford Haven River, east of district 1. District 3 to include all members on the Manchester side of Milford Haven River, east of district 1.

Rule.—That each of the aforementioned districts shall be entitled to one or other of the following officers, viz.: President, Vice-President, and Secretary, and two Directors for each district, except the district where the Treasurer resides, which shall have but one Director, and that each of said offices shall be held in each said district once in every third year.

Rule.—That the Treasurer shall give a bond, with sufficient security, as approved of by the presiding officer, for double the amount of subscription and Provincial grant, conditional for the

faithful discharge of his duty, to the President and his successor.

Resolved, That any rule, bye-law, or regulation, heretofore existing, that conflicts with the rules and resolutions passed at this meeting, be repealed.

Officers elect for the ensuing year: *Pres.*, Thomas McDonald; *Vice-Pres.*, J. R. Atwater. *Sec'y.*, Donald Boyle; *Treas.*, John Nash; *Directors.*, Henry E. Tory, William McKay, Donald Ross, John Morgan, and Charles Mills.

DAVID SCRANTON, *Sec'y.*

WALLACE AGRICULTURAL SOCIETY.

The Society has on hand, four rams and four ewes of pure Leicester breed, the crossing of which with the sheep of the place, is a great improvement, and other Societies could obtain that breed here. Our farmers pay some attention to the improvement of their stock.

The spring season was late, and consequently our harvest was very late. The crops are good, some of the latest were injured by frost and rain, and considerable harm was done by the weevil. Notwithstanding these hinderances, there is plenty in this district for man and beast. About one thousand tons of hay was shipped from here last spring, at remunerative prices. And this year's crop is equally good.

Wallace, Dec. 29, 1868 D. M.

AYLESFORD AGRICULTURAL SOCIETY.

This Society held its Annual meeting on Tuesday, the 1st December, most of the members present. The following officers were then chosen for the ensuing year:—*Pres.*, Archibald Walker; *Vice Pres.*, Johnston E. Patterson; *Sec'y.*, J. Foster; *Assist. Sec'y.*, John P. Graves; *Treas.*, Wm. Rhodes; *Directors.*, Edward Armstrong, James Smith, George Foster, John F. Pierce, Elias S. Graves; *Auditors.*, Justis W. Warner, and Gilbert Margeson. The accounts for the past year were submitted, audited, and report adopted, showing balance in Treasurer's hands of \$70.59½.

This Society owns one Devon Bull; one South Down Ram; one Shropshire Down; one Leicester Ram, purchased from J. J. Northup, Esq. All these rams give good satisfaction, but the Northup ram is the favorite with the Society, in fact he is admired by all who see him. The ram purchased in New Brunswick, was lost. The Wheat procured from the Board last winter, has not yielded as largely as was expected, the cause no doubt, was the wetness of the season.

The following is the state of the crops. Hay, an abundant crop; wheat, rye, bar-

ley, and oats, below an average. Corn good on sandy land. Potatoes, below an average. Apples, below an average. Beans, much damaged by wet.

The Aylesford Agricultural Society intend holding an exhibition of stock next autumn.

ARCH. WALKER, *Pres.*
JOHN FOSTER, *Sec'y.*

THE BRIDGETOWN EXHIBITION.

BRIDGETOWN, Dec. 1, 1868.

There was a show of stock at Bridgetown on the 22nd of October, 1868; the various kinds of Stock on the ground that day, with a few exceptions, were the best ever exhibited by the Society. The Bulls were superior; and we may here mention that the Bull from the Paradise Society was a fine animal, and a great credit to the Society; the Oxen were good; the four-year old Steers were the largest, by far, ever exhibited here, especially a pair owned by Avarad Longley, Esq. The younger cattle were creditable. Cows fair; Sheep good, not fat, but handsome, with fine wool; Horses nothing extra, except a yearling Colt owned by Lawrence Willett, Esq.—Taken as a whole, the Exhibition was creditable, and goes to prove that the Stock of the Society is improving.

After the Show, quite a number dined at Curran's Hotel.

PREMIUM LIST.

HORNED CATTLE.

- Best pair fat Oxen, \$4—Joseph Bent.
2nd do., \$3—Hiram Chute.
3rd do., \$2—C. & E. Troop.
Best pair working Oxen, \$3—Ezra Foster.
2nd do., \$2.25—C. & E. Troop.
3rd do., \$2—Joseph Fellows.
Best pair 4-year old Oxen, \$2—Avarad Longley.
2nd do., \$1.50—Joseph Fellows.
Best pair 3-year old Steers, \$2—Gilbert Chute.
2nd do., \$1.50—Abel Chute.
Best pair 2-year old Steers, \$2—John F. Bent.
2nd do., \$1.50—Abel Foster.
Best pair 1-year old Steers, \$1.50—C. & R. Parker.
2nd do., \$1—Joseph Fellows.
Best pair Steer Calves, \$1.50—C. & R. Parker.
2nd do., \$1—Robert Bath.
Best Milch Cow, \$2.50—Avarad Longley.
2nd do., \$2—Edmund Clarke.
3rd do., \$1.50—Wanford Dodge.
4th do., \$1—C. & E. Troop.
Best 2-year old Heifer, \$1.50—Joseph Fellows.
2nd do., \$1.25—Abel Chute.
Best 1-year old Heifer, \$1.25—Avarad Longley.
2nd do., \$1—Abner Bath.
Best Heifer Calf, \$1—Oliver Foster.
2nd do., 75c—C. & E. Troop.
Best Bull, \$3—C. & E. Troop.
2nd do., \$2.50—C. & E. Troop.
Best Bull Calf, \$1.50—John F. Bent.
2nd do., \$1.25—James E. Fellows.

HORSES.

- Best Brood Mare, with a Colt, \$3—Abel Chute.
2nd do., \$2.50—C. & R. Parker.
Best 4-year old Horse or Mare, \$2.50—Joseph Bent.
2nd do., \$2—Robert Parker.
3rd do., \$1.50—(not awarded).
Best 3-year old Colt, \$2.50—C. & E. Troop.
2nd do., \$2—(not awarded).
Best 2-year old Colt, \$2.50—Ezra Foster.
2nd do., \$2—Delaney Harris.
Best yearling Colt, \$2—Laurence Willett.
2nd do., \$1.50—Wanford Dodge.

SHEEP.

- Best Ram, \$3—C. & E. Troop.
2nd do., \$2—C. & E. Troop.
3rd do., \$1.50—Edmond Clarke.
Best two Ewes, \$2.50—Hiram Chute.
2nd do., \$2—Edmond Clarke.
3rd do., \$1.50—(not awarded).
Best ram Lamb, \$2—C. & E. Troop.
2nd do., \$1.50—Abner Bath.
3rd do., \$1—C. & E. Troop.
Best 2 Ewe Lambs, \$2—C. & E. Troop.
2nd do., \$1.50—Gilbert Chute.
3rd do., \$1—Delaney Harris.

Natural History.

MUSK DEER.

(*Moschus moschiferus.*)

BY A LADY SUBSCRIBER.

DEAR MR. EDITOR.—In looking over a newspaper called the *Pioneer*, which I had received from a friend in Allahabad, in the East Indies, a few days since, I chanced to come upon an article on Natural History which very much interested me; and if you have space in your valuable journal for a few extracts from the paper, entitled "A Chapter in Natural History, by Mountaineer," I think they may interest some of your readers.

The musk trade has been extensively carried on in India for very many years, and now the beautiful animal called the Musk Deer is getting shy and scarce.

I have looked up many works on Natural History, but I cannot find out exactly what size the animal is, whether large or small,—but probably it is small. The "English Cyclopædia" only says: "The Musk Deer of Nepal is of a bright reddish-yellow colour, with the chin and gullet whitish; the hair is not ringed. They are natives of India, where they live in forests in the mountains, or at their bases; they live six or eight together; the horns fall in May. The females have bristly tufts ending in a knot, instead of a horn." Dallas, in his "Animal Kingdom," says of it: "The Musk Deer is totally without horns, both male and female; they are of small size, supported upon exceedingly small slender legs, and very active in their movements; they also live in flocks. The male is furnished with a remarkable sac beneath the belly, which secretes a strongly odorous substance, the well-known powerful perfume and valuable medicine called Musk."

Tomlinson says: "Musk is the unctuous secretion of a glandular pouch or sac, situated in the skin of the abdomen of the Musk Deer. It is from the male only that musk is produced, and the secretion, when dry, is of a dark brown colour, and somewhat granular. Its taste is bitter. When the musk sac is cut from the animal's body, so powerful is the odour it exhales that the hunter is obliged to have his mouth and nose

stopped with folds of linen, and that often, in spite of this precaution, the pungency of the odour is such as to produce so violent an hæmorrhage as to end in death."

A single Musk-bag usually contains from 2 to 3 drachms.

Musk is imported into England from China in caddies of 60 to 100 oz. each.

I cannot ascertain the commercial value of the Musk-bag, but in 1832 the duty in England was 5s. an ounce; in 1842 it was 6d. the ounce; in 1845 it was declared free of duty.

Hamilton, in his "Account of the Kingdom of Nepal," writes in 1818: "The most valuable production of the Southern face of the Himalayan mountains is the animal which produces musk, of which vast numbers are annually killed."

Now, Mr Mountaineer, step forward and answer for thyself:—

"Some twenty years ago I penned a few notes on the Game of the Himalayas for the *Calcutta Sporting Review*. Writing from personal observation,—after several years spent in these grand old mountains, and devoted solely to the chase,—it may be surmised my delineation would be tolerably correct. If not, it ought to have been so, for such opportunities as I then had of noting the habits of the four-footed and feathered denizens of the hills and forests fall to the lot of very few. One article was on the 'Musk Deer,' of which very little appeared to be known, if we may judge from the meagre notices of it in works on Natural History; and this was one reason, no doubt, why I thought it deserving of a chapter to itself. As this little animal was my principal quarry, its spoil furnishing a very considerable portion of the sinews of war, and day after day, for months and months together, having seen me trudging and climbing on, from the first peep of morn till the sight of a rifle could no longer be seen in the evening twilight, in all and every kind of jungle and forest, and crag and nook and corner it was possible or probable a Musk Deer might select as its place of retreat or abode,—surely this one article would be as true to nature as the most enthusiastic Zoologist could desire, and such I believe it was. Yet if any one were to visit the same forests now, and spend a few days or weeks in that delightful occupation,—Musk Deer shooting,—and then sit down and read what I wrote about it then, he would assuredly throw away the book in disgust, and declare my description almost as far from the truth as it could well be, and he would not be far wrong. The Musk Deer of to-day in these hills is a quite different animal to those I had the pleasure of forming acquaintance with twenty years ago. A change has come over them; and a brief notice of this change, though not, perhaps, much fitted for the columns of a newspaper, may be somewhat interesting to the sportsman and the naturalist; and so, my dear *Pioneer*, you can put these pages in your desk, and when you feel very lazy—pardon me for thinking you ever do give way to such weakness—and your impy cry out for copy, you can hand them the packet.

"You will not, perhaps, object to accompany me, for a little while, back into the past

some twenty odd years. We will have a day's Musk Deer shooting together, and it will give you some idea of what the animals were then. Very few words will tell you what they are now; and, if not satisfied, there is no law of trespass in the Himalayan forests, and you can shoulder your rifle and come and see for yourself.

"It is the month of November. We have made our way from Mussoorie to the Snowy Range, and, after having had some very decent sport with the burrell and snow-bears near the Gangootree glacier, have come down a couple of marches into the pine and deodar forests to have a few days at the Musk Deer. We have seen a few while in pursuit of the larger, and—to sportsmen—more valued game, and have had a few shots at stray ones while on our way to or from the higher shooting grounds, and have everywhere in and near the forests seen abundant traces of them. A day is now to be devoted entirely to Musk Deer.

"What a fine frosty morning! The sharp air makes one's fingers tingle, and the tip of one's nose feels as if pricked by ten thousand lilliputian pins, while the breath condenses on your moustache like a miniature shower-bath. All seems very still as we saunter slowly on under the grand old deodars. A 'bum-bakree,' or spotted jay, occasionally utters its harsh note, flitting from one tree to another, or a woodpecker taps at some hollow trunk, and a few smaller birds are seen hopping among the bushes or dry leaves on the ground; but there are no signs of any exuberant animal life. The birds of passage are all gone, and there are but few constant here through the severe winters. We are on a not very precipitous hill-side, clothed with a dense forest of deodars, cheer, and rye, intermixed with a few other forest trees, and a slight undergrowth of various bushes, not thick enough materially to interrupt the view for some distance around us. We go along very carefully, with eyes and ears both doing their best, and surely any living thing bigger than a rabbit within a radius of eighty or a hundred yards must be at once perceived. But no,—a loud hiss suddenly brings us to a stand-still, the barrel of the rifle mechanically drops into the left hand, and a quick glance around discovers a Musk Deer standing within sixty paces looking at us, and it must have been watching our approach for some time. It is a wonder, you think, neither yourself nor I, so old a hunter, nor any of our attendants, caught sight of it before; but you must not be surprised at this. In a forest, where there are so many different objects which strike on the vision,—trunks and stumps of trees, standing and prostrate, big moss-covered stones, little clumps of bushes and other things,—it is wonderful how often and for what a length of time a living animal twice the size of a Musk Deer may remain unnoticed, if it only keeps quite still. One day, myself, a shikarrie, and three men, sat down in the forest to have a smoke. The men made a pipe in the ground, as usual, put in the tobacco, struck a light, and we all had a whiff, and then sat debating for some five minutes about what direction we should go. All the time a Musk Deer was standing looking at us within easy shot, and it was not noticed till we got up and were about to start. It is well the foolish animals are so patient, or the one we discovered a dozen lines back would have been half a mile away during this digression. Let us see what we

can do with it. It is face on, offering a very small mark, for a Musk Deer's neck is scarcely thicker than your wrist, and the chest a mere trifle bigger, so you must shoot carefully. You are my guest, and as we are out to-day for your especial edification, you must have all the shooting to yourself. A flash, and a sharp crack; the bullet speeds on its errand, and a handful of grey fur fluffs from the neck of the graceful little animal, but it stirs not. For a moment or two, while the rifle comes down from the shoulder, it remains as motionless as if it were a specimen of the taxidermist's art, set up there for us to waste our shots on—as in English preserves woollen pheasants are for poachers—and not a living, breathing animal, and then, turning half round, it gives another loud hiss, and stamps on the ground with its fore-feet. Our battery is a modest one. Your big, heavy double-barrel bone smasher has been left at home; and as more fitted for this work, or, perhaps, out of compliment to me, who in those days could not boast of a double, you are armed with a small-bore single rifle. A little riled at the miss, but not much, for it was a rather difficult shot,—and you and I know that misses in the field are far more plentiful than in Cooper's novels, or any other tale of the backwoods,—you quickly, though possibly a little quicker than is really necessary, re-load. While you are ramming down the bullet, the Musk Deer makes two or three bounds up the hill, and again gives a loud hiss and stands still; while you are putting on the cap it gives half a dozen more bounds, and again stands like a statue. Now it is half broadside on, and if you will make three steps to the right and rest the rifle against the trunk of that tree, which stands so convenient, you will have a surer aim. Never despise a rest when you can get one. The small leaden messenger again speeds on its invisible way, a few white hairs like the faintest puff of smoke fly off the animal's side; it makes two or three convulsive bounds, and rolls over dead.

"In a long career of forest life, rivalling that of the trappers of the Western World, and hunts innumerable after every animal to be found in the hills, and all kinds of shooting, I will be candid enough to confess, at the risk of being called mercenary, and all that, that I can recollect few more exciting moments in the actual sport than those which elapsed after killing a Musk Deer till the sex was ascertained. Sometimes one that inhabited a particular spot, and was thought to be a male, would escape many times, and what a disappointment it was when it was at last bagged, and turned out to be a female! Some readers of this may require to be told that only the adult males furnish musk, and females were to me utterly worthless. Some one has written somewhere that when sport is once connected with gain or loss it ceases to become such. My experience tells me quite the reverse, and that the value of the quarry enhances the pleasure and excitement in every way. Would grouse or partridge-shooting be what it is if the birds were not so much valued? I could never wholly realize what it really was that made Musk Deer-shooting so very exciting. It was certainly not altogether the rupee side of the question, for bird shooting was more remunerating. Whatever it was, Musk Deer shooting was from the very first my favourite sport; and now, when the price of a musk-pod is of little consequence, I still prefer it to any other.

But we must get on with our day's sport.

"As we proceed we every now and then come across heaps of Musk Deer's droppings, some evidently the accumulation of many years; a single heap containing many bushels, a little at the top quite fresh, most likely of the morning's, and smelling almost like musk itself, and the lower strata crumbling into soil. Possibly we come across a nook or corner, where, at the base of some overhanging rock which shelters a small portion of ground from rain and snow, the heap of droppings is sufficient to fill a cart. What is that dark object in the clump of bushes. Yes! it is a Musk Deer on its form. It is not forty yards off. You move a few paces to try and get a shot clear of the many stems and branches that intervene to obstruct your aim, and ere you manage this the Musk Deer jumps up and runs off without giving you a chance. A charge of shot you think would have killed it. Not the least doubt of that; but if you descend to the smooth-bore, you lose the great charm of Musk Deer shooting,—the satisfaction of making every now and then such splendid shots. On we go again, till one of the orderlies cries 'salib, salib,' in an undertone, and points to the foot of a large pine tree, where sure enough appears the head and ears of a Musk Deer evidently also on its form, and apparently looking quite unconcerned at us. You cannot get to see any portion of its body, and it is a nice shot to hit a Musk Deer in the fur-head at eighty yards, and nothing else will do, for if the brain is not touched a shot in the head is of little use; so rest the rifle against that tree, and take a cool, steady pot. You may decide for yourself, reader, whether the shot is to be a bull's eye or not. If not, it will probably be a clear miss, and the little Musk Deer might have let the report and the flash pass unheeded; but as the bullet has struck the trunk of the pine tree so close to its head, it is too much for even a Musk Deer; so up it gets and bounds away, and is out of danger ere you can re-load. You need not hurry,—it is not likely to halt; a Musk Deer on its legs when discovered and disturbed will stand a few moments at every half-dozen bounds, and sometimes, if you miss, let you re-load and fire two or three shots; but one started from its form generally goes out of sight without stopping at all. We are now getting well up the hill into the region of birch and bush rhododendron. Here is a steep ledge of rock running up beyond the limits of forest, and, looking over its edge at different points as we proceed, we shall have good views of a considerable extent of ground in the forest below. An old male moonall, seeing us on the ridge, turns from its occupation of digging for roots and maggots, and, turning its resplendent neck once or twice and uttering a low soft whistle, rises on its brilliant wing, and, soaring a little above the trees a considerable way down the hill, makes a circuit and comes half way up again ere it settles in the forest half a mile away. With the sunshine on its glistening metallic plumage the gorgeous bird flashes by, almost too brilliant an object to harmonize with this sombre autumnal forest. Two or three females, as if half ashamed of their modest brown attire, content themselves with a much shorter flight, and settle in the trees at no great distance. The sight is too common to attract much notice from us, though the flight of an old male moonall, seen ever so frequently, cannot fail to arrest some attention,

and excite some degree of admiration. There is nothing else to be seen here: and, after taking a turn in the forest, gradually ascending the hill, we again return to the ledge, and a fresh extent of ground is before us. We are more fortunate this time. There, a little below us, and a good way in the forest, is a Musk Deer standing under a birch tree. It is a long shot—for you must not forget that we are using a rifle of twenty years ago—and a dram and a half of powder will not drive even a light bullet to any great distance point-blank. You sit down, and while getting into a favourable position, try to decide how much it is under or over two hundred yards. I should think about two hundred, but a rifle carries a little farther in the rarified atmosphere here than it does in the level of London or Birmingham, so you had better put up the sight for two hundred yards with a slight incline from the perpendicular. You have a rest over a big stone, and as steady a shot as could be taken at a target at Wimbledon. These long shots in such a wee little animal are only occasionally successful, and if you please we will miss this one, as most probably at that period either you or I should have done, doing our best. The bullet must have gone very near it, but we did not see it strike, and the Musk Deer evidently wonders what is up. It looks about, and then makes a few bounds up the hill, thus coming a few paces nearer to us, and we can just hear its hiss. You re-load, and before taking another quiet pot, ask me to notice where the ball strikes. Another miss, and we see the bullet has gone over and struck beyond the mark. The Musk Deer is sure now all is not right, and makes a few more bounds and looks round in all directions. So much above, on the ledge of rock, there is not much fear of its seeing us, and if it does it won't make much difference, and you are soon re-loaded. Depressing the sight a little more you take another careful shot, and this time the Musk Deer rolls over.

(To be continued.)

Lucyfield, February, 1869.

Miscellaneous.

BOTANICAL SOCIETY OF EDINBURGH.

The Botanical Society of Edinburgh has been for thirty-three years the most active institution of the kind in the world. Its operations extend to all countries, and its annual volumes of published transactions form a general receptacle for the investigations of botanical travellers, and especially of botanists residing in the British Colonies and other countries holding commercial relations with Britain. The Society being desirous of encouraging such contributions, has appointed Secretaries in those Colonies which possess active working botanists. Professor Lawson, Dalhousie College, Halifax, has been requested to act as Secretary for the Dominion, and will be ready to furnish information to enquirers respecting the constitution and operations of the Botanical Society.

THE ZIRCONIA LIGHT.—The brilliant oxy-calcium, or Lime Ball Light, has for many years afforded some of the most striking experiments in Natural Philosophy. It is formed by exposing a disc of lime to the flame of a mixture of oxygen and hydrogen, and a most intense illumination is produced. It is now found that Zirconia far transcends Lime in this application. Of all earthy oxides, zirconia is the only one that remains permanently unaltered in an oxy-hydrogen flame. The inventors claim that Zirconia is at once the most infusible, the most unalterable, and the most luminous of all the chemical substances at present known, when exposed to the action of a hydrogen or hydro-carbon flame.

SMALL TALK--FLYING STRAWS.

Prince Edward Island Oats—these renowned oats—are being advertised for seed in Philadelphia at \$2.50 per bushel. New Brunswick oats, four pounds weight for a dollar. Cannot our Nova Scotian farmer profit any by the oat fever?—The Pink Eye Rusty Coat is found to be the best Potato for withstanding disease in Nova Scotia.—To make a country ugly, and cold, and cheerless, and barren, odious to look upon and miserable to live in,—cut down all the trees around the dwellings and by the waysides and fields.—To remove old putty from the sashes of frames, &c., apply a red hot iron, after which the most obdurate old putty may be easily cut off.—Horace Greely wrote: "Virtue is its own reward," and his printer set it up—"Washing with soap is absurd." The errors in our Yarmouth correspondent's paper on Strawberries were not quite so bad as that, and probably our printer was no more to blame than Mr. Greeley's.—There is a new Grape Disease in France, caused not by a fungus, but by an aphide, which forms yellow patches on the root.—In the Colonial Market the other day, we saw a fine porker from the country (consigned to the Messrs. Northup) which weighed 374 lbs.—The Early Rose Potato is best adapted for the South.—Grape Vines should always be grown on dry raised borders, especially in a cool wet country.—The "celebrated" Norway Oats have proved a failure in Pennsylvania.—Professor Koch, of Berlin, has ascertained that the almond is the parent of the peach,—which we doubt.—Alsike Clover will stand more hard freezing than any other sort; Mr. Saunders has made an importation of seed of this variety.—Great efforts are being made to encourage northern farmers to settle down on the old deserted farms of Virginia.—Weevil may be destroyed in seed wheat by mixing with slacked lime and leaving for a day or two.—The Editor of the *Herald of Health* has discovered that a cow or large pig sleeping under a fruit tree will protect the blossoms from spring frosts, and suggests that the small amount of heat required might be obtained more conveniently by burning kerosene lamps or lanterns in the trees on frosty nights; we do not question but that a very slight frost might thus be frightened off, and besides, the illumination of our orchards would have a nice scenic effect, but would it not be better to have heaps of prunings and rubbish on the north

side of the orchard, ready to fire when a frosty night comes on in blossoming time; this plan is adopted in Canada.—The first crop of Alsike Clover should be cut for seed; the aftermath yields no seed.—At the end of last month (January) beans were coming through the ground, at Colchester in England.—A new "literary combination" has been effected in Boston, under the title of "Tilton's Journal of Horticulture."—To have pots of Mignonette in flower in winter, sow in June or July, and stop back the shoots till flowers are wanted.—*Onoclea sensibilis* and *Osmunda Claytoniana*, two of the hardiest and commonest ferns of our Nova Scotian swamps, were in the prize sets at the Royal Horticultural Exhibition at Leicester; if the Leicestersians can bear us in long wool ram, we can beat them in native ferns, but then our ferns are left to circinate unseen and waste their sweetness on the desert air.—On 18th April last, Mr. Deitz planted one pound of Early Rose Potatoes, cut in single eyes, and on the 2nd July dug sixty pound; these he again cut in single eyes, dusted with plaster, and again planted, and dug in the fall three thousand pounds of beautiful potatoes: this was in Pennsylvania.—In Ohio they are advocating Evergreen Belts for orchards: how much more useful they would be with us.—Their disaffection in the Dartmouth Agricultural Society.—The most experienced growers say that the best time for planting strawberries is the spring.—The fine root-fibres of trees are annual, and like the leaves die every year; do not cut them off in summer.—The Ohio Society commend the Harrison, Pink Eye Rusty Coat, Early Rose, and White Peach Blow Potatoes; but the Early Goodrich, owing to the late season, has not been so good as heretofore.—The Maharajah of Jeypore lately offered a prize of \$125 to the Botanical Class of the Edinburgh University; a Class prize of \$125 is as rare as a Maharajah in Nova Scotia.—The Czar of Russia has projected a great Horticultural exhibition to come off at Moscow, in May, 1869.—Mr. Mehan has discovered that the Mayflower of Nova Scotia is not hermaphrodite as was supposed, but practically dioecious; this is the first instance of dioecism in true Ericaceae, and merits careful investigation,—which we shall give it.—Real Sculling Quince is reported as a splendid fruit, larger than the apple or orange Quince, quality good, the tree a strong grower with large dark foliage.—Grimes' Golden Pippin Apple is highly spoken of at Philadelphia.—Dry weather makes plenty of honey, and moist weather plenty of swarms.—The *Journal of Horticulture* says that the Isabella Pear has fruited at Brooklyn, and that it ripens about the middle of October, "continuing about four weeks in eating,"—we think that a pear that will continue four weeks in eating will be a profitable novelty for housekeepers.—When horses are hide bound, give them mashes and a mild dose of physic.—The relaying of the Bedford Railway Bridge over the Sackville River, is now completed, and as there is no longer a footpath, pedestrians are cautioned against attempting to cross it.—The Medical Faculty of Dalhousie College will commence their second session on the 2d of May.—Major Norton, of Pictou, some time ago discovered, in a coal mine, a Toad without a mouth. A farming correspondent suggests the propriety, in these hard lay times, of discovering a breed of cattle with the same peculiarity.—The Fenwick Agricultural Society of Noel and

Maitland obtained forty-five bushels of the Fife wheat, imported from Canada last year, by the Board of Agriculture; the Society reports: "we are happy to say that it produced an abundant crop."—Beware of the Yankee orange quince swindle.—Two bears and two wild cats have been shot at Ellershouse since the Fall. The sheep there will have rest now until another batch come round.—We read in the *Halifax Reporter* that Lyons, Michigan, has a hundred acres of peppermint under cultivation, and has made this year one thousand pounds of pure oil, and is still at it. The oil is worth \$8 a pound. Nova Scotia ought to be a good climate for the cultivation of the peppermint plant.—Unlucky mines can beat any other village in the province for pigs.—Trappers have been very successful this season; they say, however, that the fur of many animals is thin, as usual in mild winters.—The trains on the Windsor line have been strictly punctual in arrival this winter,—a great improvement upon the easy practice of the "good old times."—Mr. Downs, the Halifax Zoologist, since his return to the city, has been making proposals for a public park and zoological garden.—Cat skins are purchased by the Halifax furriers at a quarter dollar a piece.—Coal is now used instead of wood at our Railway Stations, and it is said will soon replace the latter on locomotives.—The exposure of the grass fields without snow during the severe weather of January, may lessen the hay crop next summer.—Hot water is now very generally employed in quartz mills.—Dr. Lyon Playfair has been elected member of Parliament for the Universities of Edinburgh and St. Andrew's, and has resigned his chair of chemistry in the former, so as to give up all his time to parliamentary duties. He is likely to be succeeded by Dr. Anderson of Glasgow, the famous agricultural chemist.—Ice evaporates as well as water and thus the roads become bare.—Foxes came in about the farms much earlier than usual this winter; one large fellow with a fine brush was caught in the poultry yard at Lucyfield early in December.—In France it is being found that copper saucepans are being tinned with an alloy containing 50 per cent of lead, not to speak of antimony and other metals, more poisonous than copper itself.—The thermometer indicated 3 degrees below zero at the Unlucky mines on 1st January.—The teams of several lumbermen and others have fallen through the ice this season.—Early in January flocks of grosbeaks and other birds appeared.—The conflagration of Mr. Lindsay's workshop on Star street, on the morning of 10th January, was vividly seen in Sackville, 15 miles north of the city.—Mr. Crookes, the celebrated English chemist, having perpetrated a joke in reference to the danger of wearing stockings colored by the new and fashionable poisonous dyes, a writer on popular science gravely writes:—Mr. Crookes has recently ascertained that woollen stockings dyed with picrate of potash are liable to explode on the feet of those who sit too near the fire!—Of the Fife wheat imported from Ontario by the Board of Agriculture in 1868, the Maxwellton Society of the county of Pictou, sowed twenty bushels, and report that "the yield is superior both in quality and quantity to any other kind of wheat sown by members of the society."—Through the kindness of W. J. Stairs, Esq., the Board has secured forty bushels of best Russian wheat, to arrive in the month of April.

AGRICULTURAL ODE.

BY JOHN O. H. WHITTIER.

This day two hundred years ago,
The wild grapes by the river's side,
And tasteless ground nut trailing low,
The table of the woods supplied.

Unknown the apple's red and gold,
The blushing tint of peach and pear,
The mirror of the Power told
No tale of orchards ripe and rare.

Wild as the fruits he scorned to till,
These vales the idle Indian trod;
Nor knew the glad creative skill,
The joy of him who toils with God.

O Painter of the fruits and flowers!
We thank Thee for Thy wise design
Whereby these human hands of ours
In Nature's garden work with Thine—

And thanks that from our daily need
The joy of simple faith is born;
That he who smites the Summer weed,
May trust Thee for the Autumn corn.

Give fools their gold and knaves their power,
Let fortune's bubbles rise and fall;
Who sows a field, or trains a flower,
Or plants a tree, is more than all.

For he who blesses most is blest;
And God and man shall own his worth
Who toils to leave us his bequest—
An added beauty to the earth.

And, soon or late, to all that sow,
The time of harvest shall be given;
The flower shall bloom, the fruit shall grow,
If not on earth, at least in heaven!

AN EXCELLENT OINTMENT for chapped lips and hands, for dry sores, for burns, for sore nose, for softening corns on the feet, for piles, in short for any diseased surface where a soft protecting coating is required, is what is called glycerine ointment. This can be readily prepared by simply rubbing into what is termed "cold cream" a little glycerine, just enough to give it a soft, hard-like consistency. More glycerine can be added in winter than in summer. A drop or two of the oil of roses stirred in gives it an agreeable perfume. It should be well corked and made fresh.

VARNISH FOR SHOES.—It is a bad plan to grease the upper leather of shoes for the purpose of keeping them soft. It rots the leather and admits dampness more readily. It is better to make a varnish thus: Put a half a pound of gum shellac broken up in small pieces in a quart bottle or jug cover it with alcohol, cork it tight, and put it on a shelf in a warm place, shake it well several times a day, then add a piece of camphor as big as a hen's egg, shake it well, and in a few hours shake it again and add one ounce of lampblack. If the alcohol is good it will be all dissolved in three days, then shake and use. If it gets too thick, add alcohol, pour out two or three teaspoonsful in a saucer, and apply it with a small paint brush. If the materials are all good, it will dry in about five minutes, and will be removed only by

wearing it off, giving a gloss almost equal to patent leather. The advantage of this preparation over others is, it does not strike into the leather and make it hard, but remains on the surface, and yet excludes the water almost perfectly. This same preparation is admirable for harness, and does not soil when touched, as lampblack preparations do.—*Hall's Journal of Health.*

MONSIEUR WOE'S RECEIPT FOR CURING HAMS. (said to be superior to Westphalia).—Take the hams as soon as the hog is cold enough to cut up, rub them well with common salt, and leave them for three days to drain, throw away the brine, and for two hams of 15 or 18 lbs. each, mix two ounces of saltpetre, a pound of brown sugar, and a pound of common salt. Rub the hams with these, lay them in a deep pickling dish with the rind downwards, and keep them for three days well covered with the salt and sugar, then pour over them a bottle of good vinegar and turn them in the brine and baste daily for a month. Then hang them up to dry, and after they are perfectly dry, smoke.—*Cor. Germantown Telegraph.*

STONE AXE FROM EDEN.—We have before us a relic of the stone age, in the shape of an implement picked up near the Garden of Eden Lake. It consists of a sandy slate fashioned into a wide chisel, and was probably used by the Aborigines as an axe or chisel. These stone implements are frequently found in New Brunswick, where they appear to be more numerous than in this province.—*Colonial Standard.*

COAL.—Through the kindness of Jas. Hudson, Esq., Albion Mines, we are enabled to furnish our readers with the following statement of the coal transactions of the General Mining Association for the past season, including, besides shipments from Pictou, the quantity sold for home consumption:—

	Tons large.	Tons small.
United States.....	71,496	711
Neighbouring Colonies..	7,257	6,942
Home consumption.....	13,739	5,491
Totals.....	92,492	13,144

—*Eastern Chronicle.*

SAD CASE OF HYDROPHOBIA.—About the last of August a daughter of Mr. Edward Gordon, River Philip, eighteen years of age, was bitten on the hand by a dog while she was endeavouring to stop a fight in which the animal was engaged. In a short time the wound was supposed to be healed, and the young lady enjoyed her usual health until a few days ago, when she was seized with violent fits, such as to leave no doubt that they resulted from the bite. It is feared she cannot live. The dog, which, in the meantime, had shown no signs of madness, has been killed.—*Amherst Gazette.*

CENTRAL CORNWALLIS.—A new Agricultural Society has been formed. The *Star* gives an account of the inaugural proceedings, and wishes the new Society every success, a wish in which we cordially join.

DIAMONDS.—Professor Tennant, of King's College, London, considered the discovery of diamonds in British North America to be quite within the bounds of probability. There is, therefore, no reason why diamonds may not be found in Nova Scotia.—*Mr. Foorde in Proc. N. S. I. N. Science.*

CRABS.—The crab is not very numerous on the coasts of Nova Scotia, and we doubt not that an importation of some of those splendid crustaceans, caught on the West coast of England, and which could be easily brought alive across the Atlantic, would soon people our waters with a very desirable article of food.—*Exchange.*

SAUSAGES.—Take fat and lean pork, cut off the rind, and chop fine. Season as follows: To twenty pounds of meat add seven ounces of salt, two ounces of sage and two heaped up table spoonfuls of ground black pepper. Mix with the hand and pack it up in jars. Place a cloth, after it has been dipped in melted butter, over the meat; or pour melted suet over, put a board over the jar, and set it in a cool place.

A LADY'S FARM.—The Princess Mathilde is having a model farm established in her park at St. Gratien. It will be on a large scale, and in accordance with the suggestions of the Princess Bacciocchi, who has sent there some small cows without horns.

NOT IN NOVA SCOTIA.—The fruit trees in San Francisco were in blossom on the 9th December, and strawberries selling in the market for 25c per pound.

PUBLICATIONS RECEIVED, &c.

Earth Sewage vs. Water Sewage, or National Health and Wealth, instead of Disease and Waste. By Rev. Henry Moule. Edited under direction of the Government of Canada, by E. A. Meredith, LL. D. From the Hon. Provincial Secretary, N. S.

How to make the Farm Pay, or the Farmer's Book of practical information on Agriculture, Stock Raising, Fruit Culture, Special Crops, Domestic Economy and Family Medicine. By Charles W. Deckerman, assisted by Hon. Charles L. Flint and other practical Agricultural writers, illustrated with one hundred and forty engravings. Here is a complete Farmers' Library, neatly and substan-

tially bound in one volume, containing seven hundred and fifty pages. Published by Zeigler, McCurdy & Co., Philadelphia, Pa., Cincinnati, Ohio, Chicago, Ill., and St. Louis, Mo.

Rinderpest.—We have received the Report of a Special Committee appointed by the Executive Board of the N. Y. State Agricultural Society, on the statistics, pathology and treatment of the Epizootic disease, known as the Rinderpest. These very interesting and instructive Reports are presented in a neatly bound volume of 141 pages, and an Appendix containing eleven colored plates, showing the appearance of different organs in different stages of the disease. It is a valuable and timely publication, reflecting great honor on the Society. B. P. Johnson, Secretary, Albany, N. Y.

Monthly Report of the Department of Agriculture for November and December, 1868. These monthly reports are very instructive, and the one before us particularly so.

The American Stock Journal.—In the February number, just received, we notice a number of useful articles, among them, Prevention of Diseases among Animals, Castration and Spaying Hogs, Treatment of Sows during Pregnancy, Feeding Stock, Cutting and Steaming Feed, Feeding Horses, Distemper in Horses, &c., Paying Farming, Grain Killed Horses, The Various Breeds of Cattle, Different Varieties of Geese, Colley or Scotch Shepherd Dog, Treatment of Cows during Calving, Raising Dairy Stock, Swelled Legs on Horses, Chester Whites, &c. Specimen copies sent free. Address, N. P. Boyer & Co., Publishers, Parkesburg, Chester Co., New York.

The American Entomologist.—This is a new and valuable monthly publication. The present number is well illustrated, and treats on a variety of subjects. R. P. Studley & Co., Publishers, St. Louis, \$1.00 per annum, in advance.

The American Naturalist, a popular Illustrated Magazine of Natural History; Peabody Academy of Science, Salem, Mass. Terms \$3.00 a year. Single numbers 25 cents.

The Bee Keepers Journal, a new enterprise just commenced at Nevada, Ohio. Edited by Mr. Homer A. King and Mrs. Ellen S. Tupper. Published monthly by H. A. King & Co., at \$1.00 per annum, in advance.

American Agriculturist, published by Orange Judd & Co., 245 Broadway, New York City, at \$1.50 per annum. This very popular monthly has just commenced its twenty-eighth volume. The January number is well illustrated, and contains its usual amount of interesting and instructive matter.

Vick's Illustrated Catalogue, and Floral Guide for 1869, is got up with more than

usual taste and care. Many varieties of flower seeds offered for sale have the flower illustrated here, as is now the method in the German Seed Lists, so that the young floral amateur can make the selection advisedly. Address, James Vick, Rochester, New York.

Centr d Union Agriculturist, published at Omaha, Nebraska, by Jeremiah Behm, at \$2 per annum, in advance.

Gardener's Monthly—E. Meehan, Philadelphia, \$2.00 per annum. The present number is full of interesting and useful matter.

The Canada Farmer.—A new series is commenced with January. G. Brown, Toronto.

Deitz's Farm Journal is the organ of the Experimental Farm of M. Deitz, Chambersburg, Pa. It is well got up, the choice of subjects is judicious, the matter original and well written; and if Mr. Deitz's seed grain and potatoes are as fresh and vigorous as his journal, the Experimental Farm will no doubt be largely patronized by the farming public.

ADVERTISEMENTS!

ALFRED SAUNDERS,

(Late Secretary Royal Jersey Agricultural and Horticultural Society. Formerly of the Royal Botanic Gardens, Kew, London),

SEEDSMAN,

168 Argyle St., opposite J. Northup & Sons, HALIFAX, N. S.

CALLS particular attention to his newly imported stock of Alsike and other Clovers, Grass Seeds, Mangels, Swede and other Turnips, Peas, Beans, Vegetable and Flower Seeds, comprising all the most esteemed varieties in cultivation, which he is prepared to sell at the lowest remunerative prices. Agricultural Societies liberally dealt with, and all orders promptly executed. Descriptive Catalogues on application.

AGRICULTURAL BONE MILL.

THIS MILL is now in full operation, and large quantities of Bones are offered for sale.

The Mill is under supervision of the Board of Agriculture of Nova Scotia, and all Bones sold at the establishment are genuine.

PRICES.

Half inch Bone.....\$24.00 per ton.
Finely-ground Bone..... 30.00 "

Delivered free of charge, on board the Cars at Richmond Depot.

Purchasers will save trouble by sending their own bags, which, together with orders, may be left at Stanford's Leather Store, 26 Water Street.

JAMES STANFORD.

Halifax, N.S., June, 1868.

The Journal of Agriculture

—is published monthly by—

A. & W. MACKINLAY,

No. 10, GRANVILLE STREET;

HALIFAX, NOVA SCOTIA.

TERMS OF SUBSCRIPTION:—

Fifty Cents per annum—payable in advance. A limited number of Advertisements in connection with Agriculture will be inserted on application to the Publishers.