price, but might be deprived of employment, the articles being supplied by foreigners. With the markets of the world slowly closing against her, England will before long be compelled to have a protective tariff. At present foreign nations can send their goods to the United Kingdom at nominal duties, or free, but her manufactured products are subjected to heavy tariffs. Such is English free trade in practice.

EDITORIAL NOTES.

The Peterboro' Review makes a good hit. Referring to the gratuitous circulati throughout England of Mr. Blake's spe throughout England of Mr. Blake's speech decrying the North-West and extolling Texas, it points out that Mr. Blake's position as leader of the Opposition implies the possibility of his becoming at some future day the Premier of the Dominion. Is it quite satisfactory to reflect, asks the Review, that we might have a Prime Minister of Canada, one of whose brightest triumphs consists in his specwhose brightest triumphs consists in his successful advocacy of a foreign country for set-

Nova Scotia is making extraordinary progress in agricultural matters. An exchange reports that for many miles clearings have en made, and new houses have been erected. Improvements are noticed on all hands.
Large spaces of land, swampy or otherwise,
are being drained and cultivated, and make
the best hay land that can be found. Grist and cloth mills are rushed with orders, and the latter especially are enlarging their premises, a fact which shows that home manufactures are becoming more highly appreciated—a result of the fostering care of the mises a fact which shows that ho

In noticing the bountiful wheat harvest en joyed in portions of Nova Scotia, the Halifax Mail states that many years ago the cultivation of wheat was wholly abandoned in that province owing to the ravages of the weevil. In the western section of Nova Scotia the pest has not made its appearance, and in some counties more wheat has been raised than will supply the local demand. In some of the eastern districts the weevil has re-appeared, and the average yield is about half a crop. The Mail suggests that scientists should investigate the habits of this parasite, with a view to its suppression. Hitherto the farmers have been left to their own resources in the matter, and no doubt their efforts could be rendered more effective were they directed by scientific research.

Interesting experiments are in progress with the object of ascertaining whether the unemployed can be satisfactorily settled on the land. The New York city Y. M. C. A. has a farm where applicants for situations pend a short time and learn agricultural According to a recent account in the New York Herald, that experiment is a failure. In Canada, however, a similar experiment made by the St. John Relief and Aid Society has been most encouraging. The latest reports from the settlers whom the association helped to locate in Clarendon and in Johnville, Knowlesville, and other up river settlements, are exceedingly satisfactory. Of the 45 or 50 families, numbering in all about turned out well. The others have made homes for themselves and are doing well, and would not return to the city on any account. They

A gathering which would have attracted more attention had it not taken place during the heat of a presidential campaign assembled n Chicago last week. Some three hundred farmers of Illinois and other Western States met to protest against railroad monopolies, and to organize a National Farmers' Alliance to combat the evils of the present transporta-tion system. Resolutions were adopted faaring Government control of the railroads, and the enactment of laws protecting the producer against extortion, and pledging the association not to support for office men who had favoured railroads in the past. The movement appears to be following very closely in the lines of the Granger agitation, with which they expressed their symmetry. with which they expressed their sympathy. They seem to have profitted by experience in contemplating national rather than State interference. The Granger legislation, passed in several States, was insufficient to cope with the evil, as no State could control the action of corporations outside its own boundaries. The general Government is alone competent to deal with railroad systems which span the entire continent.

Opposition leaders carefully avoid playing during the recess that unpatriotic rôle which they adopt at Ottawa. At Watford Mr. Mackenzie assured his auditors that, not-Mackenzie assured his auditors that, not-withstanding the highly-coloured report of success attending settlement in the Western States, we have nothing to fear from them. Now, Mr. Mackenzie himself always has been a grave offender in presenting highly-coloured pictures of the Western States as compared with Canadian provinces. His ad-vocacy of the claims of Kansas—where Canadian emigrants are now starving—will not be forgotten. Mr. Mackenzie also touched upon the North-West, and said visitors to Manitoba are highly gratified at the improvements noticeable there, and delighted at the success of Ontario emigrants. During the last Parliamentary session this hon, gentleman enunciated a different view. He read a score of extracts to show that our North West was comparatively related. North-West was comparatively valueless, that all the good land available was taken up, and that Ontario people could not prosper. As Sir Richard Cartwright presented the silver side of the shield to English capitalists when he sought to obtain a loan, so Mr. Mackenzie acts when he desires to re-tain the favour of his political friends, who

HOME NOTES.

would shrink from sanctioning an unpatriotic

By Telegraph and Mail, Cape Breton has the potato rot. Staten Island is suffering greatly from long-

ontinued drought.

Ripe raspberries were picked in the townthip of Caradoc one day last week in the open.

field.

The epizootic has broken out to an alarmng extent at Long Branch and several towns along the coast.

The epizootic has appeared in Halifax, several cases of horses being attacked with it being reported. It has also broken out in

Queen's county.

On Friday James Taylor sold by auction

150 acres belonging to the Hearn estate, near Hespeler, to the executors of the Checkley

Hespeler, to the executors of the Checkley estate, for \$7,010.

Eight car-loads of sheese were shipped on Saturday from Belleville for the English market, via Montreal.

The forest fires about Madison and South Amboy, N. J., were extinguished by showers on Friday night. Ten dwellings have been havened.

burned

A ladies' land league was organized at New
York on Friday night with a membership of
sixty, comprising many well-known philan-It is estimated that there will be thirty

thousand barrels of apples shipped out of Prince Edward County this fall, all the pro-

duct of the county.

Prof. J. P. Sheldon and Mr. Jesse Sparrow, agricultural delegates from England, have visited Nova Scotia and Prince Edward Island, and will leave to-morrow for England.

Over 200,000 bushels of barley has been delivered in Brampton this season, being far in excess of any former year. This speaks in glowing terms for Brampton as a grain mar-

Mr. John Cole, near Iona, has sold his farm of 197 acres, and leaves next week for Nebraska, where he has purchased 840 acres of land. Mr. Cole sold 75 acres of his property to James Galbraith for \$3,800, 72 acres to

Henry Brown for \$3,600, and the remaining 50 to Wm. C. Brown for \$2,300. A party of English gentlemen, who arrived at Ottawa Wednesday, have gone to the Upper Ottawa woods on a hunting expedition. They have a fine pack of hounds with

Mr. Timothy Parsons, of Como, Quebec, has cultivated sugar cane on his farm this year, from which he has made excellent syrap. He is going extensively into the cultivation next year.

Woodcock seem to be plentiful in the vicinity of Liverpool Market. Messrs. Preston and Alliston recently bagged seventeen couple and a half betalers. and a half between the hours of three and half-past six o'clock.

A shipment of cattle for England has been made by Major M. Coughlin and J. McDonald, of St. John. It comprised 161 head, and will be shipped in the steamer Lake Winniferon Couches for Livernool.

peg from Quebec, for Liverpool. Shipments of apples from Montreal to Great Shipments of apples from montreal to Great Britain this season are the largest ever known. Last week the quantity was 1,300 barrels, and this week it will be double that, if the consignment from Ontario arrives in time. Agents are now going through the Ottawa

Agents are now going through the Ottawa country purchasing butter for England. There is about twenty thousand pounds now at Osgoode station for immediate shipment. The prices paid are about 18 to 20 cents per THE farmers of Arthabaskaville have made

a contract with the new French Sugar Com-pany which is about to commence operations in the Eastern Townships to furnish it with the crop off eleven hundred arpents of beets for sugar manufacturing purposes.

A Nottawasaga farmer had a load of hay weighed with a man buried therein, the under-standing being that the amount obtained by the dishonest trick should be spent in whiskey,

The farmer, however, pocketed the entire proceeds of the load and his confederate exposed the game.

The Whitby Free Press says:—Mr. Jas. The Whitby Free Press says:—Mr. Jas. Campbell, of the Bay, lost two valuable cows in the fore part of the week. Mr. J. Blow has two that are very sick, and Mr. Howell's has lost the use of her limbs. Miss Leaven's cow has been sick for some days. What the

disease is is unknown. Three men, Jacob Stewart, James Ritchie. and John Dennis, all belonging near Leadbury, threshed 161 bushels of wheat in one hour. They also threshed 95 bushels in 30 minutes. This work was done with one of Glasgow & McPherson's End Shake machines, on the

farm of Mr. Thomas' Forbes, lot 16, on the At present it is the farming classes of the Eastern States who are emigrating to the West. A train has passed through Montreal with two hundred American families, who were bound for Illinois and Minnesota. About twenty French-Canadians were amongst the party from the State of Maine, and were also going west.

amongst the party from the State of Maine, and were also going west.

The new abattoirs so long required for Montreal are about to be got under way. Over half the capital, \$200,000, has been subscribed, and the projectors have given out contracts for making approaches to the site in the east end. Building will be commenced immediately. The butchers of the city, who opposed the scheme at first, are now cooperating in this great public improvement.

A law suit has just been concluded at Nan. operating in this great public improvement.

A law suit has just been concluded at Napanee, the result of which should be borne in mind by our farmers until another threshing time comes round. The suit was brought for damages on account of plaintiffa horse being frightened by a steam thresher and rendered useless by injuries received while running away. The jury has given him a verdict for \$135, and the costs, which will be fixed by the judge, will add \$300 more.

judge, will add \$300 more. The apple shipments from Port Williams station, N.B., are large and important. On Friday and Saturday last E. E. Dickie, of Canard, loaded seven cars; A. & W. H. Chase, two cars; J. E. Lockwood, Canard, one car, and C. R. H. Starr and Captain Geo. Johnson, one car. The Star rections 1201 bills for a car, and makes the total 1,929-bills which is quite a large shipment. These bbla., which is quite a large shipment. These are all for the English market.

The Ontario Agricultural Commission met The Ontario Agricultural Commission met on Monday at Belleville, the commissioners present being Messrs. J. B. Aylesworth and A. H. Dymond. Mr. J. W. Johnson, Principal of the Ontario Business College, was examined as to farm book-keeping, and presented a system which was favourably received by the commissioners. Mr. K. Graham testified on the subjects of agriculture and dairying, as did also Mr. P. R. Daly. Prof. Bell, of Albert College, was examined on the subject of agricultural education.

A leading land dealer in Stratford says

A leading land dealer in Stratford says there is an increasing inquiry for purchases as investments. Mortgage securities being scarcer and less profitable, capitalists must seek other investments. He has been ap-proached by the agent of an Old Country proached by the agent of an Old Country loan company for the purchase of 500 acres of wild land at \$8 an acre in Elma and Grey, where they are buying 2,000 acres with a view to improving and colonizing it. They have also purchased 50,000 acres in Manitoba for colonising Old Country emigrants.

Manitoba for colonising Old Country emigrants.

The Barrie Advance says Messrs. Lount and Graham, of Barrie, have returned from their duck-shooting trip to Black River, a tributary of the Severn, after having enjoyed four weeks of unvarying luck and unalloyed fun. They bagged—and ate—at the rate of twelve birds a day, and could have had made greater slaughter had they felt so disposed. Mr. S. Lount secured a fine otter, a number of which were in the vicinity. A couple of Americans were encountered—one of them a son of Rev. H. W. Beecher—at the river, and they, too, enjoyed excellent sport.

Our Montreal correspondent telegraphs:—

and they, too, enjoyed excellent sport.

Our Montreal correspondent telegraphs:—
A rumour has been spread here by interested parties that a hitch has occurred in the establishment of the company in Paris for manufacturing sugar from beet root in this province. From a good authority I have ascertained that these reports are unfounded, and I am assured the factories will be established in all the districts where farmers have agreed to raise the required quantity of beets. Mr. Lavallee, the agent of the company, has gone to Paris to report the success of his mission among the farmers of the province.

During the early part of the season moose appeared to be scarce in these woods for many miles around, and several hunting expeditions did not get a horn or hoof; some others, it is said, took horns, but nary a hoof. Since our last report, however, the McCabes, of Greenfield, captured quite a fine animal. Johnnie Cope, Indian, shot five in the woods southeast of Riversdale, last week. One of these was sold to a merchant in Upper Stewiacke, and we believe others found their way to the city. Rumour says that a party of white hunters from the city purchased one of them. Two men at Upper East River, Pictou, got one a few days ago, the meat of which was sold in New Glasgow.—Truro Sun.

The Pictou Standard devotes a portion of its space for reporting, the "fruits of the sea.

The Pictou Standard devotes a portion of its space to reporting the "fruits of the season." Following are a few instances:—Wm. McDonald, Brookland, West River, planted last spring one and one quarter bushels. Lost Nation wheat. The yield was just 25 bushels. Allan A. Ferguson sowed 4½ hushels Red Fern wheat last spring, and had a yield of 66 bushels. Donald Grant, Hardwood Hill, sowed eleven grains of oats four years ago of a new and unknown variety, picked up at a Provincial Exhibition. That harvest he saved the grain, plauting it the following spring. This he continued doing, and his result this fall was 43 stooks. The oats weighed 46 lbs. to the bushel—the common weigh from 28 to 34 lbs.—were cut as early as August 14th, were perfect in shape and colour, and yielded 20 bushels for each bushel sown.

A friend in Elderslie informs the Chesley A friend in Elderslie informs the Chesley

Enterprise that quite a number of farmers have recently located at the peninsula, where land can be had at 75 cents an acre. That paper says:—"Mr. Simpson Hepburn, brother of Mrs. Catto, Elderslie, for 25 years a resident of the township of Minto, sold his farm about two years ago. About a month ago he and his eldest son went up to the peninsula, where they located saveral hundred acres of land. Since then Mr. Hepburn and family,

together with several friends, numbering in all about twenty-five persons, have moved north, where they intend to reside. There are a number from Chesley and vicinity who intend to locate in the peninsula, and some of them have already gone there. The country is no doubt very rocky in some sections, but there are thousands of acres of excellent land in the valleys, and those who are willing to work can get good wages. Commission agents from Detroit and elsewhere are spending large sums of money in purchasing cordwood, etc., so that those who have farms to clear can get good prices for their timber and cordwood."

The enizootic still continues to wave ware. good prices for their timber and cordwood."

The epizootic still continues to wage warfare on the public and private horseflesh. Though many new cases are mentioned, horsemen report that the disease is slowly dying out in the neighbourhood. Apparently the disorder now affecting so many horses is exactly analagous to some maladies that affect the human mind at various seasons, and are ascribed to atmospheric influences, as the grippe and the antumnal catarrh or hay fever. All the indications are that the horse has what in man would be called a common cold, with the exception that there is in the equine disorder a great deal more fever than ordinarily goes with a cold, and nearly all horses in a neighbourhood have the same cold at the same time. The fact shows plainly that the disease is due to some common cause, and not to those accidents of exposure and debility to which an ordinary catarrhal inflammation would be due. Whatever the cause and character of the present trouble may be, the public is to be congratulated upon the fact that the visitation is a mild.one, and that with kindly care and rest and judicious use of medicine the horse will come out all right.—St. John News.

The new steam threshing apparatus, purchased by Prof. Brown for the Experimental

right.—St. John News.

The new steam threshing apparatus, purchased by Prof. Brown for the Experimental Farm, Guelph, was set in motion for the first time on Friday. It had been placed in position the previous night at a stack of heavy peas, gathered from fifteen acres at the northeast side of the farm, and was set in operation in good time on Friday morning. Some idea may be gained of the capabilities of the machine when it is stated that eight men on the stack could scarcely deliver the straw machine when it is stated that eight men on the stack could scarcely deliver the straw quickly enough. It ran steadily during the whole day without a hitch, and gave the greatest satisfaction to all concerned. The thresher and steamer were purchased for the farm through Mr. Pearson from Messrs. L. D. Sawyer & Co., Hamilton. A novelty which distinguishes it from other machines is the use of two shakers for separating, instead of canvases. The latter are liable to wear and decay, while the shakers will withstand such influences. Another feature is the carrier. influences. Another feature is the carrier, which is so constructed that it may be folded and carried behind the separator. Power is furnished by a Waterous engine so built as to be fireproof. It is a twelve horse-power engine at on wheels and in every waterous decided. gine, set on wheels, and in every way adapted to the purpose of threshing. The whole stack was threshed in five hours, including

toppages. MISCELLANEOUS.

Fresh outbreaks of pleuro-pneur

Viscount Lymington has sailed for New York to study the land system and agricul-ture of the United States. A terrific snow storm occurred in Buenos Ayres on the 18th of September. It is esti-mated that 700,000 cattle, 500,000 sheep, and 250,000 horses perished.

The Farmers' Alliance had a conference in London on Monday. James Howard, member of Parliament for Bedfordshire, presided. The subject discussed was the improved cultivation of land. tivation of land. OWING to the scarcity of breadstuffs i

Owing to the scarcity of breadstuffs in Russia, and the consequent importation of American coreals, an agitation is going on to secure a prohibition of the exportation of grain from the empire.

The chief inspector of grains at New York states that the amount inspected last week was the largest ever known in the history of the produce exchange, being over 1,500,000 bushels, mostly wheat.

The horse disease, which first appeared at Cleveland, O., in a mild form a few days age, spread rapidly. A very large per cent. of age, spread rapidly. A very large per cent. of the horses are affected. The disease is as violent as during the previous epidemic.

According to an official return, it appears that the total number of farms in England and Scotland reported during the week to be affected with pleuro-pneumonia is 102. In Lancashire 15 places were visited, but only six new cases were discovered. In the metropolis there have been eleven new cases. Essex heads the list, however, no fewer than 17 new cases having been reported upon. In the metropolis there are two known cases of foot-and-mouth disease.

CROPS AND TILLAGE.

FARMING-IN THE NORTH.

Some of the Advantages Enjoyed by Our Farmerse To many of our farmers, as well as to several of our prominent politicians, there is a certain fascination about "the sunny South." It is rather pleasing to think about keeping stock in a country where there is green vegetation constantly. There are apparent advantages in being able to work the soil at all times, and to raise semi-tropical fruits, sugar, rice, and cotton. Apparently, to many, a farmer can enjoy more and acquire more by locating in the far South than in the far North, and this idea has been unfortunately too much and otor Apparently, to many, a farmer can enjoy more and acquire more by locating in the far South than in the far North, and it is idea has been unfortunately too much give the control of the control

would attack them or not." Mr. Howard adds that the yield of the November planted potatoes was, roughly speaking, double that of the spring-planted. SORGHUM SUGAR.

respect of Establishing this Industry in

chinery to manufacture sugar from the cane but for syrup for domestic use a crushing mill and evaporators are all that are requir ed, and already there are several mills in the

A QUEBEC EXPERIMENT.

Restoring Fertility to Exhausted Soils.

novement.
It is worth while to determine whether o

FINE FARMING.

Drying Potatoes for Expertationa.

The San Francisco Commercial Merula ays:—"During the past year or two an important industry has sprung up in this State in the way of preserving potatoes for a foreign market. A machine has been invented for pressing and preserving potatoes in such a manner that they may be dried and kept for a number of years in any climate. No oxidization or fermentation takes place in the process; they retain to a great extent their natural taste and original freshness. Shippings made to England during the past year by Falkner, Bell & Co. inve attracted attention, and the demand for California preserved potatoes in that country already exceeds the supply. The first shipment to Liverpool brought the sum of \$180 per ton over all expenses of shipment. Last year about 20 tons were shipped from Cas Francisco, which brought 45 English shillings per hundred-weight, or at the rate of \$\$ per suck for green potatoes. At Areats, Humboldt county, a strong company has been erganized to preserve potatoes by the new process. Venturs has an apparatus in working order, and will san Erancisco merchants and capitalists evince a lively interest in the enterprise, and are watching results blossly. The testimony of English merchants is to the effect that the products are superior and in active demand." The farmer has no money to squander in costly experiments, but when a new source of profit is opened, which can be pursued without risk, it becomes the duty of all to give it a fair trial. Such seems to be the condition attached to the cultivation of the Amber sugar cane or sorghum plant, over which a number of farmers in this county have become quite enthusiastic. The crop this season has fully matured long before the frost came, and already samples of the syrup have been offered in our market. At the Burford show this week there were a number of competitors for the prizes offered, and some of the exhibits were perfectly clear and almost entirely free from any peculiar taste.

It is quite true that it requires costly machinery to manufacture sugar from the cane, ed, and already there are several mills in the county.

One farmer, Mr. W. F. Robinson, of Burford, informs us that he is so satisfied with the results of his experiments this year that he intends abandoning maple syrup and sugar manufacture for the less expensive and equally satisfactory cultivation of sorghum.

It remains to be seen whether another season will prove equally favourable to the growth and maturing of this new claimant for public favour, but if so, there can be no doubt but that the cultivation of a small plot will be set aside on every farm for the growth of enough, at least, for family use,—Brantford Expositor.

Storing Potatoes for Winter.

If houses are used for storing potatoes, they should be such structures as would afford an atmosphere rather moist; the admission of drying winds through orevices is always injurious to potatoes, and where greenness in the tuber takes place either from exposure to light or from drying winds, they become entirely unfit for human—indeed, we may say, for all animal food. The practice, therefore, of exposing potatoes to the influence of light and air, for sale, as is done in large towns and cities, must be one highly prejudicial to public health; and that it is so has been long since proved by some eminent French doctors, who traced the existence of certain diseases in towns and cities, to the use of potatoes so exposed. Potatoes treated with such care as we have endeavoured to describe will keep well, if required, until the end of July, and we believe that most persons will agree with us in thinking that a good old potato at that time is much better eating than any new ones then procurable. At all events a great point is gained if, by care, we can have a good plump sample of potatoes in the middle of July, instead of the battered, abrivelled, and fuzzy ones we are in the habit of seeing delivered in our markets about that period. Potatoes are an expensive crop where the tillage of them has been well done, and it therefore entails a necessity on the farmer to see that some little care is bestowed to prevent needless losses on the produce.—The Irish Farmer. Storing Potatoes for Winter. Restoring Fertility to Exhausted Soils.

One does not naturally look to the province of Quebec for examples of well-directed effort for the improvement of farming. In no other portion of Canada has a naturally fruitful soil been more recklessly exhausted of its productiveness than in Quebec. In large tracts of country in that province wheat-growing has become unprofitable. Fields that once bore golden harvests are now poor barren pastures. Incessant cropping, without due culture, has rendered sterile a vast breadth of soil. The Chapleau Government proposes to grapple with this state of things. It is resolved, says the St. John News, to bring home to the inner consciousness of the simple-hearted but unprogressive habitans a sense of the value of a better system of farming—a system which will keep good new land in good condition and restore fertility to worn out soils. The plan is to distribute a part of the yearly grant in promotion of agriculture in the form of superphosphate of lime to the county societies, to be expended in the way likely to secure the best results. This is the sort of fertilizer most needed by the worn-out wheat lands. It is hoped that by this distribution farmers will be taught the secret of restoring exhausted soils by expeditious methods. The experiment deserves success, and the Chapleau Government credit for trying it. The condition most favourable to success exists in Quebec. The lands requiring a plentiful supply of the superphosphate of lime are extensive. The means of furnishing the supply are abundant. The Ottawa valley, if not other regions, too, in Quebec, contains vast deposits of phosphate, and the sulphuric acid with which the phosphate requires to be treated for manurial purposes is to be obtained there in large quantities. Great results, from a farming point of view, may be ultimately secured through this movement.

It is worth while to determine whether or not superphosphate of lime might not be an

Locust Investigations.

The result of the locust investigations by the United States Entomological Commission for this season shows a remarkable immunity from the attacks of Caloptenus spretus, the species of locust under consideration. A single swarm was observed in Utah, and local scattered flights of inconsiderable importance in Dakota and Minnesota, and Eastern Oregon, near Walla Walla. For the first time for many years Montana has been free from locust, only scattered individuals having been seen in the Yellowstone valley. The researches of the commission now carried on for four seasons has cleared up the question of the permanent breeding grounds of the locust, which exist in Montana, in the valleys of the upper Missouri, the Judith basin, and the Yellowstone valley with its tributaries. From this region the swarms right be border States to the eastward, and also pass downsinto Utah and Wyoming. Colorado is mostly visited by swarms flows armed the properties the commission is in press and will appear in November, and the third is in preparation. It is worth while to determine whether or not superphosphate of lime might not be applied with profit to long-cultivated soils in New Brunswick. And it seems desirable to ascertain whether or no any workable deposits of the phosphate exist in this province. The discovery of such a deposit in an easily accessible position in New Brunswick might prove of great public value.

Fine Farming.

What prity acres can Froduce.

What books a man get on fifty acres of land? Effect a country from the wants of an arresting permanent meadow, as it is called, or mowing. This will yield thirty tons of hay. It may seem extravagant, any the New England Farmer, but when it is remembered that on many large farms now that are highly manured in spots, two, or even three tons is not an uncommon yield, it is very safe to recken on this crop. In fact we know of many small farms which cut, on an average, when the start, when the same than the same than the same that it is surplessed in the spring the land in the fall set it is the sary for the fact. Which a farm of this size will earry for with a system of solling, or partial solling, the area for pasturage could be much reduced. Next, five acres of arable of ready crops, vegetable query for with a system of solling, or partial solling, the area for pasturage could be much reduced. Next, five acres of arable and it were for wheat, one for cora, one for postatoes, and one for early crops, vegetable query for with a system of solling, or partial solling, the area for pasturage could be much reduced. Next, five acres of arable and it will make the soll being darker, etc. If the location is one near to a good local market, where what is called by warm weaker, will start it. Hoold and dry, the seed will ruman the benefit with the seed will ruman the seed of the

Salt has been often tried on Ontario farms, and it is unfortunate that no carefully prepared results have been preserved. It is finding favour in the Western States for wheat-growing. Mr. Jas. McMurray recently made an experiment with salt upon different parts of a field of wheat on his farm in Hendricks county. At that time the wheat had not been threshed, but the appearance of the heads and stalks indicated a considerable advantage in the case of the most heavily salted parts of the field over that upon which no salt was sown. Mr. McMurray made as careful an estimate as was possible of the yield on the different plats of ground, and found that those treated with salt made a yield on the different plats of ground, and found that those treated with salt made a yield of about four bushels per acre more than that which was not so treated. The salt was the refuse article bought at pork-houses for 50 cents a sack of 250 pounds. He put an average of 500 pounds of salt, costing \$1, to the acre. The salted wheat matured some six days earlier than the other, a point that is eften of great importance, and increased the value of the crop some \$3 more than the cost of the salt applied. He gives the result of another experiment conducted at the same time which is worthy of record. He sowed the same field in clover about the time the salt was applied, and found that on the portion treated to 250 pounds of salt per acre the clover stands well. On the portion treated to 500 pounds the stand is not good, and on the portion treated to 1,000 pounds there is no clover to a line. The set of clover on the portion of the field not spwn with salt, or sown with 250 pounds per acre, is very good, indicating that too much salt is damaging to the young plant.

Fall Turning-Up of Garden Soil.

Professed gardeners well understand the

Fall Turning-Up of Garden Sett.

Professed gardeners well understand the fall management of these important little family farms. It is needless to tell them how much the success of nextyear's crops depends upon turning up the ground (say in November) intended for such crops. But there are many others—those who have small gardens—and in this class are many of our regular well-to-do farmers—who only raise half crops of vegetables, and these of an inferior quality, and wonder how it is so. Now, we cannot too often repeat the advice that if they will use the garden fork, and turn the soil up full fork deep, allowing it to remain in lumps all winter exposed to the frost, it will put the soil in excellent condition and tend greatly to add to the production of next year's crops. This is especially the case with ground not so treated frequently, and we would mention that every other year is best, instead of every year as some gardeners do. Gardens, and Fall Turning-Up of Garden Soil.

especially old ones, should also be limed about once in five years, and salted about every other spring, applying of lime at the rate of about thirty bushels to the scre, and of salt from eight to ten. In applying salt keep it from coming in contact with boxedging and all other evergreens, very small trees, &c. Such a course will bring up your old gardens in a surprising manner. Turnips, radishes, &c., will grow as well as they ever did, and all other vegetables be largely benefitted.—Germantown Telegraph.

LIVE STOCK.

CANADIAN STOCK.

"Monroe," writing to the Turf, Field, and Farm, says. —"As the blood of the above breeds of horses is being diffused among the trotters of the day and with great success, and as they are from the same fountain-head, it may be of interest to some of your readers to know their origin, especially the Tippooe coming through the Sager horse, as he was one of old Tippoo's best sons and probably better bred. About seventy years ago a clergyman by the name of Howard, from the northern part of the State of New York, moved to Prince Edward county, Ontario, near Belleville, and took with him a fine, large, brown mare, and a great roadster. A short time after his arrival there she proved to be in foal, and the produce was a black colt. This was the first Tippoo known in Canada, and as he advanced in years was called Old Tippoo. He being a good horse and producing fine stock, there were many interested in his breeding, and after a careful search it was ascertained he was by Ogden's Messenger, dam unknown. This horse was the founder of the family known by that name. Some have gotten him mixed up with Tippoo Saib, bred in New York by imp. Messenger. The Sager horse was by Old Tippoo, not by Wild Deer, as it has been given by many breeders; his dam was by Wild Deer, and he was by old Tippoo, making him inbred to Old Tippoo. The dam of Wild Deer was a running mare, taken from the United States to Canada, and was very fast, beating everything she ran against, both in short and long distances, and went by the name of Wild Deer, and was claimed by her owner to be a thoroughbred. The Sager horse got more good stock than any of the sons of Old Tippoo. One of his sons got James H. Burke and other good ones, and his daughters were highly prized as dams. For many of the above facts I am indebted to S. S. Howell, of Port Hope, Ontario. His father was the owner of Old Tippoo for many years, and he died in his possession. Mr. Howell is well posted on the Tippoos, and I think his statements are correct. The Royal George branch of the Tippo

STOCK RAISING.

Shorthorns as Beet Producers.

The London Field says:—"The recent inspectors—they have been little more—especially from America, display quite a new taste, and use quite novel terms. Little is heard of pure this, or pure that, but a great deal about thick flesh and constitution. The translantic meat trade is revolutionizing other people's minds besides those of English land occupiers. The trade is flourishing, is large even now, and it promises to become enormous. And our American cousins, with a characteristic love of a big thing, are quite under its influence in all their ideas of Shorthorns. They are now buying cattle, not with a view to a high average at an auction, but to a regular supply of prime carcasses of beef. If we are to continue to do business with them, we must change our plan. It is in vain to try and charm them with the old catch-words. "Thin-fleshed, I tell ye, and tender to boot," is a verdict more often heard upon English Shorthorns than seems desirable.

At all events, the following is a true statement:—Of the Transatlantics who came to buy cattle at the "Royal" of 1880, hardly one took Shorthorns. Herefords they bought, Polled Angus, and even Norfolk Red Polls, if they were beefy-minded. The American dairymen had curious inquiries to make about "milk and butter records," which sounded odd to the newest dabblers in fancy dairies, i.e., to the English belauders of Jerseys for being "grand whole colours," and "correct shade of silver-grey."

Lower Province Stock.

The Maritime Furmer, speaking of the live stock show at the St. John Exhibition, says:—There were one or two fine thoroughbreds and a number of very good trotting and carriage horses. The grand grey imported stallion Percherons challenged admiration, and some of their progeny, dark iron greys, appeared to be fine useful looking animals. The Percheronstock promises well. The Ayrshires, the favourite dairy stock, were shown in great force. Jerseys, Shorthorns, Devons, Herefords, were well represented. The quality of the stock shown proves that very fine cattle can be raised in New Brunswick. Etter's, of Westmoreland, great three-year-old Durham bred oxen, weighing in the aggregate 5,000 lbs., which moved like giants among the other cattle, would in any country be accounted extraordinary.

Sheep in Winter. Lower Province Stock.

Sheep in Winter.

Two extremes should be avoided in the matter of shelters. One may be insufficient, while the other may be so close as to be unhealthy. The majority of mistakes are with those who shelter insufficiently. In such instances more food is consumed than would otherwise be required, and no corresponding benefits accrue—though the effects upon the sheep are not so unfavourable as those following confinement to improperly ventilated rooms. Another error is found in too close crowding while under shelter. This is particularly objectionable when any considerable number of animals are confined together. While a portion of them may lie down, others are compelled to stand, and through restlessness or fright often trample upon and injure their fellows. The shelters on the sheep farm should be made to increase in size as rapidly as the flock multiplies its numbers.

The water supply should be carefully looked to. A flock of given number will drink more water in winter than will be needed when on pasture. If such an arrangement can be economically secured, access to water twice a day is better than but once. This for two reasons:—First, the more timid animals, which are likely to be held back in the morning by their stronger fellows, have a chance when the latter are not so eager; and secondly, all danger from over-drinking of told water should be forced upon the flock only nuder the extremest necessity. Stock will live under such circumstances, but satisfactory thrift will not be secured.

Ewes in lamb should, as far as practicable,

be fed and sheltered separate from the non-breeding animals, as the crowding and more rapid movements of the latter are apt to result injuriously, while such separation makes more convenient certain little attentions to which breeding ewes are entitled as the yearing season approaches, and which may be profitably accorded to them. Advantage will be found in subdivision of the several ages and sexes into as many smaller lots as circumstances will admit of, as such course lessens the liability to crowding and overfeeding of the stronger animals at the expense of the weaker ones. It also brings each animal more directly under the eye of the attendant, who will the more readily detect the first symptoms of deviation from the desired thrift.—Nat. Live Stock Journal.

VETERINARY.

DISEASES IN LIVE STOCK.

A Veterinary Surgeon Replies to the Agri-cultural Commission. LONDON, Oct. 17 .- Dr. Wilson, veterinary surgeon, has sent the following replies to questions addressed to him by the Agricul-tural Commission:—"The diseases most pre-valent are, in horses, those of the digestive and respiratory organs; in cattle, diseases of valent are, in horses, those of the digestive and respiratory organs; in cattle, diseases of the digestive and respiratory organs and foot diseases. Sheep and swine are generally healthy. These diseases have been frequent, but when professionally treated havegenerally terminated favourably. I attribute their occurrence to changes of food, sudden changes of atmosphere, over-exertion, etc. I notice a tendency to the following diseases among thoroughbreds:—Heavy draught horses are subject to swelling of the limbs, grease heels, mallanders, and salianders. Shorthorns are more liable to tuberculosis than other breeds of cattle. I believe the shorthorns to be more liable to tuberculosis, and the females of that breed to puerperal fever and apoplexy, than other breeds. As to the merits of Ontario as a stock raising country compared with other countries, I believe it can compete fairly with any other country within the scope of my knowledge. In warmer climates stock can be raised more cheaply, but they are more liable to diseases of a contagious nature."

SHEEP ROT.

The Cause and Progress of the Disease Discovered.

M. Zundel, of Paris, has scientifically investigated the terrible malady sheep rot, and by a series of patient observations has thrown considerable light on the origin of the disease, its development, and contagion. The malady is the result of an alteration of the blood, wherein the watery element predominates. It is the predominance of this water that has popularly associated sheep rot as peculiar to wet seasons and marshy lands, concluding that the water penetrated into the organism, by air saturated with vapour, and by forage plants, extremely aqueous, on which the animal was condemned to feed. Associated with these symptoms, were worms in the liver, or flukes, but these were considered merely as the consequence of the animal's exhausted system. M. Zundel's conclusions are the opposite of these ideas. For him, if the sheep becomes diseased, it is owing to the medium in which it lives being infested with worms; its malady is not derived directly from either the air or the food; its liver, an essential organ, is affected, as such becomes the home of the worm. The rot is due to the presence of the worm, just as is the scab to the acarse; results the same—exhaustion of the system by the invasion and the destruction of organs. There are two varieties of worms, of which the smaller penetrates deeper into the hepatic duct, and produces more profound injury. The action of the parasite is slow, and may be divided into three stages; the first coincides with the months of August, September, and October, when the animalcule, in its most rudimentary stage, aniers the august, september, and October, when the animalcule, in its most rudimentary stage, aniers the august, september, and october, when the animalcule, in its most rudimentary stage, aniers the august, september, and october, when the animalcule, in its most rudimentary stage, aniers the august special conditions and where the decay or "rot" of The Cause and Progress of the Disease Dis their volume. It is at this peried that the animal commences to exhibit signs of exhaustion, and where the tissues lose their colour; the third period represents the decay or "rot" of theliver, and is effected gradually in the months of January, February, and March. The worms have now arrived at their full development, and fill the liver ducts, while distending them. It is at this moment that they quit the liver for the intestines, where they are digested. But they have anticipated the preservation of their species since March and the following months by numbers of eggs, which, absorbed by the bile, are expelled with the excrements, and where they can be detected by the microscope, as many as 3,000 being found in a pound of the dejections, and fifty in a single drop of bile. The eggs remain in the larvæ stage pending two to four months, when they become transformed into an animalcule, very aquatic and very active, penetrating into the intestines of the sheep either by means of the water drank, or attached to snalls and insects that cling to the grass. The rot is contagious, but no marshy land can produce the disease unless the water or pasture be previously infested with the parasite. It is only in autumn that the infection can take place, as by then the eggs ejected in the excrements are hatched. Avoid, then, the pasture land where the worms must exist from being the feeding ground of diseased stock. The winter exposure kills the worms. New mown hay is not, as some allege, an irritant of the digestive organs; where it produces irritation, it is simply the consequence of allowing animals to eat too much of the odorferous, appetizing forage, and not drinking sufficiently, which brings on indigestion.

Professor Brown's report on Texas fever, the introduction of which has been contemplated with so much anxiety, has just been printed and circulated among members of Parliament, together with "Further correspondence relating to diseases of animals in the United States of America." The perusal of this volume will convince anyone of the wisdom of the Privy Council in refusing to remove the restrictions at present imposed on the importation of live cattle from America. Until the Government of the United States shows more energy than it has hitherto manifested in preventing the spread of pleuropneumonia and other contagious diseases it will be the duty of the Administration in this country to maintain the existing regulations rather than run the risk of infesting all our home-bred herds. In Professor Brown's report it is stated that the symptoms of Texas fever which the ordinary observer would notice would be indications of an intense fever, with pulse ranging from 60 to 120 per minute; breathing often laboured and generally frequent; loss of appetite; in cows, the almost entire suspension of milk secretions; head drooping when standing, and when lying the nose thrust hard on to the ground, sometimes turned back over the side and pressed against it; the ears drooped, back arched, flank hollow, hind legs drawn up under the body; frequent knuckling over of the hind fetlocks, disposed to lie down and get up again, which it does with difficulty. When made to move it is often with a staggering gait. Occasionally an animal appears delirious; at others sleepy. The coat becomes rough. At times frequent twitching of the muscles appear about the shoulders and other parts of the body.

"Eles I Big Lies!" Texan Fever.

"Lies ! Big Lies!" Not so fast my friend; for if you would see the strong, healthy, blooming men, women, and children that have been raised from beds of sickness, suffering, and almost death, by the use of Hop Bitters, you would say "Truth, glorious truth." See "Truths," in another column.

VEGETINE.—The great success of the VEGETINE as a cleanser and purifier of the blood is shown beyond a doubt by the great numbers who have taken it, and received immediate relief, with such remarkable cures.



9.000,000 Bottles SOLD SINCE 1876.
This Syrup possesses Varied Properties

This Syrup possesses Varied Properties.

It Stimulates the Ptyaline in the Saling which converts the Starch and Sugar of the food into glucose. A deficiency in Ptyaline causes Wind and Souring of the food in the stomach. If the medicine is taken immediately after eating the furmentation of fund is prevented.

It acts upon the Liver.

It acts upon the Kidneys.

It Purifies the Bowds.

It Purifies the Bowds.

It Purifies the Blood.

It Quiets the Nervous System.

It Promotes Digestion.

It Nourishes, Strengthens and Invigorated it carries off the Old Blood and makes new, It opens the pores of the skin and induces Realthy Perspiration.

It neutralizes the hereditary taint, or poison in the blood, which generates Scrofuls, Erraipelas, and a manner of skin diseases and internal humors.

There are no spirits employed in its manufacture, and it can be taken by the most delicate babe, or by the aged and feeble, cure only being required to attention a directions.

TESTIMONIALS

CANADIAN. For Asthma.

Nackawick, York County, N.B.

Dear Sir,—I was troubled with asthma for a
number of years, and your INDIAN BLOOD
SYRUP has given me more relief than any other
medicine I ever used. MRS. JAMES DUNHAM.

Dyspepsia and Indigestion

Ind. Harbour West, Halifax Co., S.C.
Dear Sir.,—I was troubled with Dyspepsia and
Indigestion, and your INDIAN BLOOD SYRUF
proved a most efficient remedy. It is the bes
medicine in the country. MRS. ROWAN.

For General Debility.
Fermoy, Addington Co., Ontario, Canada.
Dear Sir.—I was troubled with General Debility, and failed to obtain relief until I tried you
INDIAN BLOOD SYRUF, which completely
cured me.

JAMES NOONAN.

A Very Valuable Medicine.
Westport, Leeds Co., Ont., Jan. 31, 1872.
Dear Sir,—I have suffered greatly with Kidne
Disease, and the INDIAN BLOOD SYRUE the only medicine that ever gave me relief.
firmly believe it to be a valuable medicine.
PETER DONNELLY, Blacksmith.

Cures Dyspepsia and Indigestion.
Westport, Leeds Co., Ont, Jan 26th, 1878.
Dear Sir,—I have been afflicted with Dyspepsia.
for about nine years, and your INDIAN BLOOD
SYRUP is the only medicine that ever helped
me. I would say to all suffering from this discuse to give your medicine a fair trial.
W. H. RORISON.

A Valuable Medicine.

Nackawick, York Co. N.B.

Dear Sir.—L have used your INDIAN BLOOD
SYRUP for some time, and it has proved to be a
valuable medicine.

C. E. HEUSTIS.

on beword Bust Medicine Ever Used.

Nackawick, York County, N.B.

Dear Sir.—Your valuable INDIAN BLOOD
SYRUP is the best medicine I ever used, and I
heartily recommend it to all sufferers.

A Valuable Medicine.

Eganville, Renfrew Co., Ontario, Canada.

Dear Sir.—I have used your truly excellent INDIAN BLOOD SYRUP, and an convinced a its merits. It is a valuable remedy.

MR. JOHN McGRATH. Pain in the Back, Lungs, and Shoulder. Toronto, April 21st, 1880

Toronto, April 21st, 1880.

Dear Sir,—I have had a pain in the small of my back, also through my lungs and shoulders, for more than three years; I have also had live complaint and dyspepsia. I have tried doctors and other medicines, but never received any relief until my attention was called to your valuable INDIAN BLOOD PURIFIER; after its use a short time, I can say that I have felt better, and more able to do my work than I have for the last two years.

J. G. AMEY,

77 Richmond street west.

A Wonderful Cure.

Burferd, Brant County, Ontario.

Dear Sir,—In the spring of 1877 I was taken very sick, and had different doctors to attend me. Some thought it was Diabetes that afted me, while others said it was disease of the kidneys, but none of them did me much good, and I keps failing until I was advised by friends to try your INDIAN BLOOD SYRUP. I obtained some, which helped me so that in a short time I was able to do my housework. I would have died had it not been for your valuable medicine.

CALISTA SHAVER.

Cures Liver Complaint.

Dear Sir,—I was a great sufferer from Liver Complaint, and having tried other medicine we little or no effect, I was induced to try some your INDIAN BLOOD SYRUP, which I chased from your Agent, William Dier, at W. port. I think your Syrup is the best medicine introduced into Capada. MICHAEL BENNE

Dirxiness in the Head.

Dirxiness in the Head.

Dear Sir.—This is to certify that your INDIAN BLOOD SYRUP has entirely cured me of dirainess in my head and sick stomach.—It is an invaluable medicine.

HEZEKIAH MARKS.

Oures Dyspepsia and Liver Compilaint.

Sincoos, Norfolk, Ont., Feb. 1872.

DEAR Sir.—Your BLOOD SYRUP being high ly recommended by persons in this neignbour bood who have used it. I was induced to purchase a bottle. I have since used several bottle for myself and family, and I am now quite sallantification in the second several bottle for myself and family, and I am now quite salland LIVER COMPLAINT, and I heartily recommend its use.

Nauralgia.

mend its use.

Beuralgia

Toronto, April 20, 1830.

Dr. Clarke Johnson: Dear Sir.—When I vise
ed your manufactory last autumn. I was unfile
ing from a fearful pain in the face and head—the
physicians call it neuralgia—and when you we
commended me to try your INDIAN 84.00
SYRUP I had no faith in it; but indeed in
ceived such a benefit from it, that I have sin
recommended it to several who awere sufferi
as I was, and with a good result, and I cannot
this opportunity of your second visit to this of
go by without thanking you very much for
commending me to try the INDIAN 84.00
SYRUP. Yours very truly, GEO, LOVES
jumber merchant, 250 Since street.

Severe Pain in the Side.

Toronyo, April 23st, 1836

Dr. Clark Johnson: Dear Sir.—I have be troubled with a severe pain in my side for over two years, so that it caused me many siseple nights. Having heard of the wonderful effect of your INDIAN BLOOD SYRUP and BLOO PURIFIER, I purchased a small bettle, and has entirely cured me; also my digestion in improved greatly.

JOHN MCEACHREM, Carpenter, 14 Sheppard size

Liver Complaint.

Port Jollie, Queen's Co., N.S.

Dear Sir.—I have used your excellent INDIA

BLOOD SYRUP for Liver Complaint, and have received great benealt therefrom. I can recommend it to all sufferers. R. J. M. DONALD.

Recommends it to all who are afflicted with Liver Complaint.

I recommend your BLOOD SYRUP to any one suffering with Torpid Liver or any disease arising from it.

Arkona, Lambton County, Ontarie. CRAMP IN STOMACH.

Cross Hill, Waterloo County, On and loss of appetite. Your INDIAN BLA SYRUP effected a speedy care. NANCY L.

CAUTION TO DRUGGISTS .- B