## RELIGIOUS INTELLIGENCE.

The Friends have in England 827 meeting-houses, 265 recorded and 400 unrecorded ministers, and 14,500 members.

The Disestablished Church of Ireland has 1,679 clergymen, including 12 bishops and 1,761 deans and archdeacons.

Pastor Chiniquy, who has been lecturing in Australia, has been selected by the Synod of Eastern Australia to represent it in the Pan-Presbyterian Council in Philadelphia.

The Rev. Mr. Brookman, of St. Catharines, and formerly minister of the Episcopal church, was publicly baptised by the Rev. R Cameron, in the Tabernacle Baptist church, Brantford, on Friday evening.

The Right Rev. Dr. Barclay, recently consecrated Bishop of Jerusalem, has sailed from Southampton for Port Said, whence he will proceed to Jaffa. His diocese embraces Syria, Mesapotamia, Egypt, Abyssinia, and Asia Minor.

It is understood that Rev. D. D. Currie, editor of the *Wesleyan*, has accepted an invitation to become pastor of the Centenary Methodist church, St. John. He will likely be succeeded on the *Wesleyan* by Rev, T. Watson Smith, at present assistant book steward.

It is estimated that among the English-speaking population of the world there are 18,000,000 Episcopalians, 16,000,000 Methodists, 13,500,000 Roman Catholics, 10,250 000 Presbyterians, 8,000,000 Baptists, 6 000,000 Congregationalists, 1,000,000 Unitarians. Of minor religious sects there are 1,500,000 adherents and 8,500,000 are of no particular religion.

The Presbytery of Miramichi held its quarterly meeting in St. John's church on Tuesday last, Rev. John Robertson, Moderator. There were eight clergymen present. A large amount of business was transacted. Mr. Grierson, of Halifax, gave a very interesting report of the work done by him in the lumber camps on the North-West and Little South-West, and at Redbank and Kouchibouguac. Mr. Grierson was appointed to spend a few weeks at Carleton, Kent.

At the recent meeting of the Halifax Presbytery, the following delegates were elected to represent the Halifax Presbytery at the General Assembly, to be held in Montreal:—Revs. Robert Sedgewick, D.D.; P. G. MacGregor, D.D.; —. Thorburn, (Bermuda); George Christie, Principal MacKnight, C. B. Pitblado, P. Morrison, A. Pollock, D.D.; and Elders W. Robinson, J. S. Maclean, W. G. Blanchard, Robert Murray, W. G. Pender. Hon. S. Creelman, J. D. Madill, and J. K. Munnis.

The Church of England has 2 Archbishops, 28 Bishops, 4 Suffragan Bishops, 30 Deans, 74 Archdeacons, 610 Rural Deans, 23,000 clergy of all classes, one-fifth of whom have no parochial charge. One Archbishop—Canterbury—and 24 Bishops have seats in the House of Lords. The income of the prelates ranges from $75,000 to $12,000 a year; that of the Deans, $15 000 to $1,025. The number of churches is about 16,000. The gross income of the Church from all sources is $40,000,000 per annum.

A farewell meeting was held in the First Baptist Church, Brantford, on Monday evening, in honour of the Rev. W. H. Porter, who is leaving for Rochester. The edifice was crowded. Deacon Shinstone occupied the chair. Appropriate speeches were made by Rev. Mr. Brock, Rev. R. Cameron, Rev. Dr. Cochrane, Deacon Chittenden, Rev. J. R. Comb, Wm. Patterson, M. P., Rev. Thos. Henderson, Deacon John Harris, Rev. Thos. Lowry, Rev. W. W. Willis, Rev. John Gilchrist, St. George. The Rev. W. H. Porter made a very appropriate address.

Lord Penzance, of the Court of Arches, received letters of request from the Bishop of London for the institution of a new suit against the Rev. A. H. Mackonochie for continuing Ritualistic practices at St. Alban's, Holborn, notwithstanding the sentence of three years' suspension which had been pronounced against him. It was stated that the object of the suit was to deprive Mr. Mackonochie if he persisted in his contumacy. Lord Penzance being satisfied that an insincere and frivolous use of the process of the court was not about to be made, issued the citation.

The following resolution has been passed by the Chatham District Conference of the U. E. Church in reference to the sale of liquor on holidays:—"Whereas the friends of sobriety and good order are petitioning the Legislature of Ontario to pass a law prohibiting the sale of intoxicating liquors on all public holidays and thanksgiving days; therefore be it resolved, that this Chatham District Conference of the M. E. Church in Canada would declare their sympathy with the said movement, and all earnestly urge the circulation of a petition asking the members of the Assembly to pass such a law."

All writers, irrespective of nationality or political bias, speak in enthusiastic terms of the labours of the American missions in Asia Minor, and of the real benefit that have resulted. Dating back as far as 1831, when the first American missionary arrived at Constantinople, for almost fifty years their work has known no halt. At first looked at with suspicion, these missionaries have patiently laboured on, and have succeeded in overcoming fanaticism and race prejudices. None are more emphatic in their praises of the American missions than the Russians. The method employed has been particularly American, inasmuch as they have thought that the only true foundation of civilization was in the free use of paper and type. Familiarizing themselves with the various languages of Asia Minor, they translated the Bible into Arabic, Armenian, Turkish, Bulgarian, Hebrew-Spanish, Armenio-Turkish, Grœco-Turkish, and Kurdish. Not content with the wide dissemination of the Bible, books on arithmetic, geography, grammar, and natural history have been published. Last year 19,175 copies of books were issued in Armenian, 20 300 copies in Turkish, and in all the various languages 61,200 books were distributed, representing 6,397,000 pages. The plans for church congregations are eminently wise and practical, even republican in character. If there is some slight initiative, the grand principle which is followed out is that help is only given to those who help themselves. In Asia Minor, the whole number of Protestants is very nearly 30,000. There, formed into a separate community, have a chief or head man at Constantinople. There are not less than 225 separate Protestant congregations scattered through the country from the Black Sea to the Mediterranean, and from Turkey to Persia. There are 176 schools, with an average attendance of 15,500 persons. There are boarding-schools for girls, under the supervision of the American missionaries, in Marsovan, Bruasa, Bitlis, Mardin, Kharpoot and Aintab, with theological seminaries and colleges at other places. Here is evidently a great work going on, accomplishing, as it were, miracles, and all moving quietly along, and, strange to say, not one inhabitant in the United States in ten thousand is aware of the great benefits some honest, sincere, and pious men of their own country are accomplishing in Turkey and Asia Minor.

**Good Advice.**

Now is the time of year for Pneumonia, Lung Fever, &c. Every family should have a bottle of BOSCHEE'S GERMAN SYRUP. Don't allow for one moment *that* cough to take hold of your child, your family or yourself. Consumption, Asthma, Pneumonia, Croup, Hemmorrhage, and other fatal diseases may set in. Although it is true GERMAN SYRUP is curing thousands of these dread diseases, yet it is much better to have it at hand when three doses will cure you. One bottle will last your whole family a winter and keep you safe from danger. If you are consumptive, do not rest until you have tried this remedy. Sample bottles 10 cents. Regular size 75 cents. Sold by your Druggist. 399

## MOTHERS' DEPARTMENT.

### AN INFANT'S DIET.

*(Continued.)*

Have you any remarks to make on sugar for sweetening a baby's food?

A small quantity of sugar in an infant's food is requisite, sugar being nourishing and fattening, and making cow's milk to resemble somewhat in its properties human milk; but, bear in mind, it must be used sparingly. Much sugar cloys the stomach, weakens the digestion, produces acidity, sour belchings, and wind:—

"Things sweet to taste prove in digestion sour."
*Shakspeare.*

If a babe's bowels be either regular or relaxed, lump sugar is the best for the purpose of sweetening his food; if his bowels are inclined to be costive, raw sugar ought to be substituted for lump sugar, as raw sugar acts on a young babe as an aperient, and, in the generality of cases, is far preferable to physicking him with opening medicine. A infant's bowels, whenever it practicable (and it generally is), ought to be regulated by a judicious dietary rather than by physic.

VACCINATION AND RE-VACCINATION.

Are you an advocate for vaccination?

Certainly. I consider it to be one of the greatest blessings ever conferred upon mankind. Small-pox, before vaccination was adopted, ravaged the country like a plague, and carried off thousands annually; and those who did escape with their lives were frequently made loathsome and disgusting objects by it. Even inoculation (which is cutting for the small-pox) was attended with danger, more especially to the unprotected—as it caused the disease to spread like wildfire, and thus it carried off immense numbers.

Vaccination is one, and an important cause of our increasing population; small-pox, in olden times, decimated the country.

But vaccination does not always protect a child from small-pox?

I grant you that it does not always protect him, neither does inoculation; but when he is vaccinated, if he take the infection, he is seldom pitted, and very rarely dies, and the disease assumes a comparatively mild form. There are a few, very few fatal cases recorded after vaccination, and these may be considered as only exceptions to the general rule; and, possibly, some of these may be traced to the arm, when the child was vaccinated, not having taken proper effect.

If children and adults were re-vaccinated—say every seven years after the first vaccination—depend upon it, even these rare cases would not occur, and in a short time small-pox would be known only by name.

Do you consider it, then, the imperative duty of a mother, in every case, to have, after the lapse of every seven years, her children re-vaccinated?

I decidedly do: it would be an excellent plan for every person, once every seven years to be re-vaccinated, and even oftener, if small-pox be rife in the neighbourhood. Vaccination, however frequently performed, can never do the slightest harm, and might do inestimable good. Small-pox is both a pest and a disgrace, and ought to be constantly fought and battled with, until it be banished (which it may readily be.

I say that small-pox is a pest; it is worse than the plague, for if not kept in subjection, it is more general—sparing neither young nor old, rich nor poor, and commits greater ravages than the plague ever did. Small-pox is a disgrace: it is a disgrace to any civilized land, as there is no necessity for its presence: if cow-pox were properly and frequently performed, small-pox would be unknown. Cow-pox is a weapon to conquer small-pox and to drive it ignominiously from the field.

My firm belief, then, is, that if every person were, every seven years, duly and properly vaccinated, small-pox might be utterly exterminated; but as long as there are such lax notions on the subject, and such gross negligence, the disease will always be rampant, for the poison of small-pox never slumbers nor sleeps, but requires the utmost diligence to eradicate it. The great Dr. Jenner, the discoverer of cow-pox as a preventative of small-pox, strongly advocated the absolute necessity of every person being re-vaccinated once every seven years, or even oftener, if there was an epidemic of small-pox in the neighbourhood.

*(To be continued.)*

## USEFUL RECEIPTS.

### POULTRY.

*(Continued.)*

ROAST TURKEY WITH OYSTER DRESSING.

Dress and rub turkey thoroughly inside and out with salt and pepper, steam two hours or until it begins to grow tender, lifting the cover occasionally and sprinkling slightly with salt. Then take out, loosen the legs, and rub the inside again with salt and pepper, and stuff with a dressing prepared as follows: Take a loaf of stale bread, cut off crust and soften by placing in a pan, pouring on boiling water, draining off immediately and covering closely; crumble the bread fine, add half a pound melted butter, or more if it be very rich, and a teaspoon each of salt and pepper or enough to season rather highly; drain off liquor from a quart of oysters, bring to a boil, skim and pour over the bread-crumbs, adding the soaked crusts and one or two eggs; mix all thoroughly with the hands, and if rather dry, moisten with a little sweet milk; lastly add the oysters, being careful not to break them; or first put in a spoonful of stuffing, and then three or four oysters, and so until the turkey is filled; stuff the breast first. Flour a cloth and place over the openings, tying it down with a twine; spread the turkey over with butter, salt, and pepper, place in a dripping-pan, in a well-heated oven, add half a pint hot water, and roast two hours, basting often with a little water, butter, salt, and pepper, kept in a tin for this purpose and placed on the back of the stove. A swab made of a stick with a cloth tied on the end, is better than a spoon to baste with. Turn until nicely browned on all sides, and about half an hour before it is done, baste with butter and dredge with a little flour—this will give it a frothy appearance. When you dish the turkey if there is much fat in the pan, pour off most of it, and add the chopped giblets previously cooked until tender, and the water in which they were cooked now stew down to about one pint; place one or two heaping tablespoons flour (it is better to have half it browned) in a pint bowl, mix smooth with a little cream, fill up bowl with cream or rich milk and add to the gravy in the pan; boil several minutes, stirring constantly, and pour into the gravy tureen; serve with currant or apple jelly. A turkey steamed in this way does not look well on the table, but is very tender and palatable. It is an excellent way to cook a large turkey.

ENGLISH ROAST TURKEY.

Kill several days before cooking, prepare in the usual manner, stuff with bread-crumbs (not using the crusts) rubbed fine, moistened with butter and two eggs seasoned with salt, pepper, parsley, sage, thyme, or sweet marjoram; sew up, skewer, and place to roast in a rack within a dripping-pan; spread with bits of butter, turn and baste frequently with butter, pepper, salt and water; a few minutes before it is done glaze with the white of an egg; dish the turkey, pour off most of the fat, add the chopped giblets and the water in which they were boiled, thicken with flour and butter rubbed together, stir in the dripping-pan, let boil thoroughly and serve in a gravy-boat. Garnish with fried oysters, and serve with celery-sauce and stewed gooseberries. Choose a turkey weighing from eight to ten pounds. If it become too brown, cover with buttered paper.

A rising occurred at Ciudad, Bolivia, on the 29th ult. Gen. Castillo, Commander of the place, was killed. The rebels proclaimed Gen. Colina their chief. Guzman Blanco is taking active measures to suppress the rising. Three steamers and 2,000 men are ready for the campaign.

## AGRICULTURAL.

### LUMP ON THE FACE.

SIR,—I have a young mare, rising four years old, that has a lump on her face, under the eye, about the size of your hand. It is very hard. I blistered it twice without any beneficial effect. It came on very suddenly, and has been there about eighteen months. Tell me of a cure, if any, through your very valuable paper, and oblige,

A. M. T.

Sydenham, Feb. 9.

[If the enlargement is of a bony character, it may be cured by a surgical operation. We would recommend you to have the case examined by a competent veterinary surgeon.

### THISTLES AGAIN.

SIR,—In your weekly issue of the 5th December there appeared lengthy remarks on Canada thistles, and on the 19th by one who tried it. He recommends drawing them up by hand, fallowing, etc., and again remarks of February 6th in nearly the same strain. It is all lost labour and too much of it. I maintain that the thistle is very easy to destroy, and no loss of time or crop. It is after this method. The thistle land is sown with fall rye and clover in the usual time, and manured for early green feed. To destroy the thistles, begin to cut the rye and thistles on the 10th of June to the 24th, never taking heed to moon, rain, or sunshine. If I cannot feed it all I make hay of it. If any thistles show the following year repeat the same, cutting with clover, and that is the last of the thistles in that piece of ground. The Word says, "To everything there is a season and a time to every purpose under the heavens." I believe the month of June is the time to kill thistles—it is then the juicy young stems run up to meet the sun's rays, and put out their tender foliage. When they are cut off at this time of year they bleed to death, the root has lost its life sap, it dies.

Yours, etc.,
NORTH SIMCOE.

Vespra, February, 1880.

### THE AGE OF THE HORSE.

BY A. LIANTARD, M.D., V.S.

*(Continued.)*

19 Years—Nippers—flattened sideways. Dividers and corners—triangular.

20 Years—Nippers—flattened sideways. Dividers flattened sideways, or becoming so. Corners—Triangular.

21 Years—Nippers and dividers—flattened sideways, or becoming so. (Fig. 22.)

22 Years—Nippers, dividers and corners, flattened sideways.

Fig. 23 shows a defective jaw of an old horse, in which the external dental cavity

Fig. 22.

is yet remaining. The excessive length of the teeth in those animals allows to make out the age by adding to the age given by the marks of the crown as many years as there are lines in excess in its length.

Fig. 24.—Jaw of a cribber, with wearing of the teeth on their front face.

Fig. 25—Bischopped mouth, easily recognizable by the shape of the teeth, the presence of the dental star, which is not surrounded with enamel.

### LONDON-PURPLE FOR INSECT-KILLING.

We make the following extract from advance sheets of the 3d Bulletin of the U.S. Entomological Commission, by C. V. Riley, as published in the *American Entomologist* for February:—

A number of barrels of this powder were placed at my disposal the past season and distributed to various observers and agents in Georgia, Alabama and Texas. Early in the spring, Mr. A. R. Whitney, of Franklin Grove, Illinois, found it to be a perfect antidote to the canker-worms which had not been prevented from ascending his apple trees, and the experiments of those whom I had entrusted to make them on the cotton-worm, as well as those made under my own supervision, all showed that its effects are fully equal to those of Paris green. Like the latter, it kills the worms quickly, and does not injure the plants, if not applied in too great a quantity. Farther, it also colours the ingredients so as to prevent their being mistaken for harmless material. Finally, its cheap price removes the temptation to adulterate the poison, as every adulteration would prove more expensive than the genuine article. It is even superior to Paris green, as, owing to its more finely-powdered condition, it can be more thoroughly mixed with other ingredients and used in smaller proportion. Experiments on a large scale have been made with the dry application at the rate of 2 pounds to 18 pounds of diluents, also at the rate of 1, ½, ¼ and ⅛ pound to 18 of the diluents. The last proved only partially effectual, and in no case were the plants injured or the leaves even burned. In all but the last case the worms were effectually killed, but as the mixture, at the rate of ¼ pound, was applied with greater care and regularity than is generally had on a large scale, and also in very dry weather, the proportion of ¼ pound to 18 of the dilunets is most to be recommended. All higher proportions are simply waste of the material.

Like Paris green, it is not soluble, but is much easier kept suspended in water than the former. If applied in this way, some care has to be taken in stirring it in the water, as it has a tendency to form lumps, owing to its finely-powdered condition. Experiments on a large scale with this material diluted in water gave the following results:—When used in the same proportion as Paris green, namely, 1 pound of the poison to about 40 gallons of water, one experimenter reports that the leaves were slightly crisped, while four others report a perfect success, and no injury whatever to the plant. Experiments by myself and Mr. Schwarz showed that when applied in the proportion mentioned, and thoroughly stirred up in the water, the leaves were partly crisped, though by no means so much as by arsenic, even when applied in weaker solution. When used in smaller proportion, or at the rate of ⅜ or ½ pound to 40 gallons of water, it did not burn the leaves, and still proved effectual in destroying the worms. Repeated experiments on a smaller scale confirmed these results obtained on large fields, and also showed that the proportion may be still further reduced, and when applied with great care and in very dry weather, ¼ pound to 40 gallons will kill. Still further reduction in the proportion of the powder used gave negative results. I would, therefore, recommend the use of ¼ pound of this powder to from 50 to 55 gallons of water as the proportion most likely to give general satisfaction by effectually destroying the worms without injuring the plants.

### SCAB IN SHEEP.

This is a contagious disease, and once it becomes well established, is not easily got rid of. There are three varieties due to the presence of different insects. The *Sarcoptes* burrow in the skin; the *Dermatodectes* simply hold fast to the skin, and the *Symbiotes* pierce the epidermis merely in search of food. The latter congregate in large quantities. The irritation these parasites cause produces effusion, and from this they derive their support. These parasites propagate very rapidly, and are not easily destroyed. However, the healthy sheep should be removed from the affected, and properly dipped before being put into their new quarters, and then those having scabies must be dipped and watched carefully, and it may be necessary to clip the wool from some of these and smear the affected parts with mercurial ointment. The dressings may need repeating several times, and if possible, selections of apparently cured animals should be made from the affected flock, and these put in other quarantine for a time. In this way the animals may be cured. A strong solution of carbolic acid applied to trees and fence posts is also beneficial in preventing the spread of the scab, where it is practicable.

### LICE ON SHEEP.

Some of my sheep have small, light-coloured lice on them, and they begin to pull their wool. I would like to hear from some one, through your most excellent paper, who has had experience in dealing with parasites when the wool has considerable growth. It is from four to six inches on them now. I have thought some of using unguentum (mercurial ointment), using one part of the standard article mixed with seven parts of lard. Is there any danger from its use if the animals are kept dry?—D.M. (The remedies you mention are dangerous unless used with great care. A better plan is to use a dip of some kind. You might try the following:—Tobacco, 16 lbs.; soda ash, 3 lbs.; soft soap, 2 lbs.; spirits of tar, 3 lbs.; water, 50 gallons. Boil the tobacco in water; then add the rest. This quantity will dip 60 or 70 sheep.

## ONTARIO DAIRYMEN'S CONVENTION.

**Annual Meeting of the Association at London, Ont.**

LONDON, Ont., Feb. 18.—The third annual meeting of the Dairymen's Association commenced in the City Hall this afternoon. A large number of delegates from different parts of Canada and the United States were present, amongst whom were Messrs. Thomas Ballantyne, of Stratford; E. Darwell, Ingersoll, first Vice-President; Wm. Watson, second Vice President, Falkirk, Ont.; Henry Lossee, Norwich; Jas. Jaynes, Milverton; John Podmore, Woodstock; L. S. Richardson, Kerwood; W. J. Scott, Stoto; Hugh McCartney, Brucefield; John Wheaton, President of the London Cheese Fair; John Pierce, of the firm of Pierce & Pickering; Adam Spiers, Caistorville, Ont.; Prof. X.A. Willard, Little Falls, N. Y.; Robt. McAdam, N.Y.; C. E. Chadwick, Ingersoll; Hon. Harris Lewis, Frankfort, N.Y.; L. S. Richardson, Kerwood, Ont; Prof. L. B. Arnold, Ithaca, N.Y; James James, Dorchester, and a number of others, whose names could not be ascertained.

In the absence of the President, Mr. Caswell, of Ingersoll, took the chair.

A letter was read from Mr. Ayer, of Montreal, by the Secretary, strongly recommending the creameries, and showing the advantages that would accrue to Canadian butter-makers from that mode of manufacture. He contended that butter factories pay better than cheese factories. A good suggestion was made in the material the tubs were made of. The letter was well received.

Mr. X. A. WILLARD contended that oak tubs should be used, and thought at the late International Dairy Fair they recommended the Welsh tubs and ash.

Mr. Chadwick read an interesting paper "On the cow and the grass."

Mr. John Heaton, London, Mr. H. Lossee, Norwich, Mr. Charles Chadwick, Ingersoll, and Mr. Hill were appointed the nominating committee for the officers for the ensuing year.

LONDON, Feb. 19.

Rev. W. F. CLARK addressed the meeting on improving the breed of cattle, recommending the formation of a national Society of Dairymen. The principal objects of this society would be to test the relative worth of the various breeds of cattle for butter and cheese making, and to obtain and encourage dairymen and farmers in raising an improved breed.

The next order of business was a paper on butter and butter making by Hon. Harris Lewis, of Frankfort, N.Y. After a few introductory remarks Prof. Lewis said that butter in all probability became known by accident. It had been known for centuries, but how it first became known they had never been able to find out. He referred to the different makes and kinds of butter, which he divided into three kinds or classes—good butter, poor butter, and oleomargarine butter. The first of these three, was what all desired, but few could make. To make this, it was necessary, in the first place, to have a good breed of cows for making butter. He had found in the course of his long experience that in all herds, individual cows gave poorer milk than others, and the cream from this poorer milk deteriorated from the quality of butter made by others and good cows in the same herd. In the production of first-class butter, the food and treatment of a cow played important parts. Where a cow was cruelly treated and poorly fed, she would not give as good milk as if properly cared for and fed. In this respect, many dairymen might find one of the sources of poor butter. He had found in his long experience that long grasses alone, or mixed with one-quarter of clover, formed the best food for producing butter. Milking was also an important thing to be considered in butter-making. The butter-making powers of many cows' milk were spoilt by improper milking, and in this part of the dairy work great care should be taken. Of all the kinds of churns with which he had met, he found the old-time dasher churn, if properly constructed, to be the best, and superior to all those of recent invention. With regard to the temperature, the churn should be stopped when the butter came into small globules, and the temperature reduced. The appearance of the butter-maker, he regarded, as having a great deal to do with the taste of his butter. He had seen some butter-makers whose hair had not been combed for seven or eight months, and he had often attempted to calculate what were the relative proportions of hair and butter in what they sold for butter. He also advised dairymaids not to eat onions whilst butter-making, as it tainted the butter, even if their breath did not smell.

Prof. WILLARD also read an interesting paper upon the same subject, dealing with the recent inventions for butter-making. With regard to the raising of cream, the speaker advocated raising the cream at the farm as preferable to sending milk to the factory to be skimmed By adopting this method, cream was raised better and quicker, and in larger amounts per gallon of milk than by the other.

It was moved by Mr. H. S. LOSSIE, seconded by Mr. Wm. Huxley, and carried,

That this Association take the earliest opportunity of petitioning the Dominion Legislature for the removing of duty on cheese and butter cotton bandages, and the chairman appoint a committee for drafting out a petition for the carrying out of the same.

The Chairman appointed Messrs. Lossie, Huxley, Henderson, Weld and Chadwick as a committee for that purpose.

It being noon, the Association adjourned.

The convention met pursuant to adjournment at two. The meeting having been called to order, the report of the committee on nominations, wherein was recommended the appointment of the following officers for 1880, was read and adopted:

President, E. Caswell, Ingersoll; First Vice-President, L. R. Richardson, Strathroy; Second Vice, John Wheaton, London; Directors, Rev. W. F. Clarke, Guelph; Adam Spiers, Cainterville; H. L. Lossie, Norwich; Wm. Hill, Seaforth; Thomas Ballantyne, M. P. P., Stratford; William Thompson, Arkona; C. P. Perkins, Barrie; Auditors, Wm. Watson, Falkirk, and J. Scharff, Woodstock.

The Rev. L. B. Arnold read an interesting address upon Arnold's process of cheese making.

LONDON, Feb. 20.

The CHAIRMAN stated that he was happy to report that the finances of the Association were in a better state this year than ever. He had heard from an unofficial source that the Government had appropriated $1,500 towards the Association. They had enough money now to supply all the patrons with a copy of the report. The Committee presented the following resolution:—

Moved by Mr. LOSSIE, seconded by Mr. Hill, and resolved:—

That the Executive Committee be empowered to publish the extra copies of such portions of the transactions or addresses as they may deem advisable for distribution among the patrons throughout the Province, and that each cheese and butter factory send the Secretary the number of patrons belonging, or connected with it, and that the manager of each factory applying for copies send at the same time the approximate number of cows usually supplying their factory, and that the returns be made by 1st of March.

The resolution presented by the committee was adopted.

Prof. BROWN, of the Agricultural College, Guelph, read an essay upon soiling of cattle in Canada. They were accustomed to hear of different kinds of farming. He said the day was not far distant when every foot of land would be cultivated, at least in Ontario. One of the great agents in this direction was the grazing and raising of cattle. Soiling was the housing of cattle in all seasons, and from the middle of April to the middle of October the food was taken to them. They cannot secure in this country the rich pastures of England because they could not secure a variety of grasses. Our droughts, and especially the winter, operates against the richness of the pasture. Although there was sufficient rainfall in Canada per head of cattle, it was not properly distributed. On an average, cattle upon the green grass does not go back, but makes little fat, therefore the frame can be made in the field, but the preparation for the foreign markets must be made elsewhere. Whatever tended to fatten was also of benefit for milking cows. With the glorious sun, of which we have so much, we ought

Fig. 23.

to have a rich succession of green fodder, such as makes so rich an agricultural produce in other countries. He would divide the subject of green fodder into six different elements, all of which were highly necessary to have in order to produce the required steady and constant supply of green fodder. These were as follows:—An early cut; repeated cuttings from the same plant in one season; a sufficient number of kinds to afford an unbroken supply of succulent herbage; the kinds to differ in constituent element, that is, in their chemical properties; the largest possible produce per acre; and lastly, a high fattening and milking property.

Mr. WELD asked Prof. Brown whether he had ever heard of the existence of pleuro-pneumonia, hog cholera, or of foot and mouth disease in Canada.

Prof. BROWN replied to Mr. Weld, and said he had never known that any of the above-named diseases had existed at any time in Canada.

The Rev. W. F. CLARK moved:—

That this Association has listened with great interest to the address of Prof. Brown, of the Ontario Agricultural College, and hereby expresses its thanks therefor It also takes this opportunity of reaffirming its high appreciation of the institution with which Prof. Brown is connected, and its earnest desire for its continued and increasing prosperity.

Mr. CHADWICK objected to the motion as introducing politics.

Mr. WELD moved an adjournment, which was carried.

## FRUIT GROWERS.

**Winter Meeting of the Association.**

HAMILTON, Feb. 18.

The winter meeting of the Fruit Growers' Association of Ontario opened this forenoon at ten o'clock in the Council Chamber at the City Hall, the President, Rev. Dr. Burnet, of Hamilton, presiding. There were also present Messrs. D. W. Beadle, Secretary; Wm. Roy, Vice-President, Owen Sound; W. Smith, Drummondville; P. E. Bucke, Ottawa; John Croll, Aultsville; P. C. Dempsey, Albury, P. E. Ont.; A. McD Allan, Goderich; Murray Pettit, G. W. Cline, Winona; Thomas Beall, Lindsay; Charles Arnold, Paris; W. Saunders, London; Dr. Watt, Niagara; J. S. Woodard, Lockport, N.Y.; H. M. Switzer, Palermo; John Buchanan, Stratford; Chief J. H. N. Johnson, Tuscarora; Jesse Moyer, Jordan Station; John Magill, Oshawa; J. D. Pringle, Hamilton; W. Holton, Barton; Judge Darnell, Whitby; F. Goth, Arkona; Joe. Cline, Ancaster; James Hinchcliffe, Hamilton; J. Bowman, West Flamboro'; Dr. Bell, Walkerton, and others.

Mr. BEADLE read the minutes of previous meeting, which were, on motion, adopted.

The PRESIDENT introduced Mr. Woodard, of Lockport, N.Y., and announced that the annual grant from the Ontario Government had been increased to $1,800.

Dr. BURNET said that he had communicated with some eminent pomologists with a view of obtaining papers on subjects interesting to the Association. His friend, Dr. John A. Warder, President of the American Forestry Association, of North Bend, Ohio, U.S., had responded and sent in a paper on "Planting trees along our roadsides for shelter, shade and ornamentation, what to plant and benefits of such planting." The President then read the paper, which is a very lengthy but intensely interesting one. It was received with marks of applause.

A vote of thanks was unanimously carried to the writer, after which Messrs. Arnold, Holton, Darnell, Bucke, Smith, Johnson, Goth, Burnet, Woodard, Beadle, Roy, Croll, the President and others spoke on the matter contained in the paper.

The SECRETARY read the following notice of motion:—That Dr. Watt will call the attention of the Society to the disease called yellows in peaches, and will ask for some action to be taken in representing the same to the Local Legislature for some power to be given to municipalities for the proper destruction of the infected trees.

Several members expressed their views on the subject, which showed that the disease was spreading.

At the evening session Mr. Beall read a paper on "The advisability and feasibility

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of using the Canadian walnut tree as a shade and ornamental tree throughout Canada."

Mr. Bucke moved a vote of thanks for the paper, after which a discussion took place upon the subject.

Mr. Arnold read a paper on "What shall we cultivate?" which proved very interesting, and for which a vote of thanks was passed. Dr. Watt referred to the cultivation of the apple tree, and threw out some practical suggestions, which were appreciated. Mr. Gott read a paper on "Forest tree seeds and seedlings.

Mr. Saunders, of London, read a paper "On some decidnous trees and shrubs desirable for more extended cultivation."

On motion of Mr. Smith a unanimous vote of thanks was tendered to Mr. Saunders.

Mr. Woodward called attention to the ironwood, a beautiful and hardy tree, of which no mention had been made.

Mr. Bucke also drew attention to the cutleaf birch and the cutleaf maple, which had not before been mentioned.

Mr. Saunders said that his paper included principally those trees and shrubs not generally cultivated.

Dr. Bell (Walkerton) objected to the ironwood on account of its slow growth.

A number of the members took part in the discussion, valuable hints as to the best kind of shade trees and shrubbery being given by Messrs. Arnold, Beall, Beadle, Col. Brooks and others.

Two of the Six Nation tribe of Indians who had entered the room while the discussion was going on, were then introduced by Chief Johnson, and cordially welcomed by the President. They were heartily cheered on taking their seats at the Board.

Mr. Beadle informed the meeting that the Indians on the reservation took a deep interest in the welfare of the Association. There were no less than sixteen of the Six Nation Indians on the membership roll. (Applause.)

The committee on cultivated fruits reported in favour of the apples and pears shown by Mr. P. C. Dempsey, of Albany, and the committee appointed on seedlings, referred favourably to those exhibited by John H. Ramer, of Markham; A. M. Smith, of Drummondville; H. J. Lott, of Sydney Township, County Hastings; Mr. George Cox, of Goderich Township, County of Huron; Dr. Watt, of Niagara; Messrs. Day & Dempsey, of Albion. The report was adopted.

The subject of cattle at large was then discussed, and the practice of allowing cattle to roam at large on the highways in the country was strongly condemned, as well as the present mode of fencing, which was a source of great expense to the farmer and gardener.

A number of different fences were spoken of, after which the following resolution was carried:—

That in the opinion of this meeting every man should be compelled to look after his own animals, and that the President appoint a committee to investigate and report on the subject of fences at the next winter meeting.

The PRESIDENT named the following gentlemen as members of the Committee: Messrs. Beall, Bucke and Dr. Watt.

HAMILTON, Feb. 19.

The Association resumed at 10.30 this forenoon, the President presiding.

There was a full attendance of members.

The PRESIDENT said that the Association had yesterday welcomed amongst them Col. Rice, of Wyoming, N.Y., and he would now ask that gentleman to step forward and take a seat on the platform. Col. Rice thanked the President for the compliment, and took a seat as requested.

Mr. SMITH, of Drummondville, read an excellent paper on "Raspberries," which was very well received,

Messrs. Saunders, Roy, Switzer, Arnold, Smith, Bell, Burnet, Brooks and Dempsey took part in the discussion, which soon swayed from raspberries to grafting apples, pears, etc.

It was moved by Dr. WATT, seconded by Mr. D. W. Beadle—That the President appoint a Committee on Vegetables of recent introduction, to make observations during the summer and report at next winter meeting.

Mr. BEADLE thought it was important that more interest should be taken in the production of vegetables. He urged the appointment of a committee as suggested in the motion.

Dr. WATT favoured the appointment of such a committee, who should prepare a critical report upon the best varieties.

The resolution was carried, and the President appointed Messrs. Allan, Page, Taylor, Hood, Bucke, Biggar and Dempsey as the Committee.

The following were selected as the Committee on New Fruits:—The President and Messrs. Dempsey, Smith, Arnold, Gott, Saunders, Holten, Morris and Beadle.

It was moved by Dr. WATT, seconded by Mr. M. Pettit, "That a committee be appointed to draft a bill to be presented to the Legislative Assembly, on the best method of eradicating the disease called yellows in peaches; and further, that a deputation from this Association be named to present the same and urge the necessity of Government aid to help the orchardist to stamp it out."

The resolution was carried, and Messrs. A. H. Pettit, Roy, Saunders and Burnet were appointed a committee to carry it out.

It was moved by Mr. SAUNDERS, seconded by Mr. BUCKE, "That in the opinion of this meeting it is desirable that the professional fruit list in the prize list of the Provincial Association be abolished, and that there be one general fruit list open alike to professional and amateur fruit growers."

An animated discussion ensued, after which the resolution was withdrawn by consent.

Mr. ANDERSON, of Ayr, brought up the subject of apple-pullers, packers and parers, and said that the matter should be discussed, and the best practical means made generally known. He stated that he always pressed his apples well into the barrels, and though the sides might be a little bruised, they never rotted. The object was to have them solid in the barrel, so that they would not be injured by the barrel being rolled.

Mr. BEADLE addressed the Association, referring to an apple-puller shown them by Mr. Anderson. He did not approve of it at all. He thought the only practical method was the old one of pulling the fruit by hand. He went on to speak of the packing of apples, condemning in strong terms the tricks practised by many packers. With reference to parers, he thought the best implement was a good jackknife.

HAMILTON, Feb. 20.—The Ontario Fruit Growers' Association concluded their winter session last night.

Mr. WRIGHT (Renfrew) spoke on the subject of packing apples for shipment, advocating that care should be exercised in making good selections.

Several members followed on the same subject.

Mr. WRIGHT said, in reference to the Rhode Island Greening, which had been noticed to assume a brown colour after the 1st of February, that he would next year experiment on two barrels, and submit a report of the result to the Association.

After further discussion,

Mr. F. ANDERSON moved, seconded by Mr. Thomas Beall, "That the Provincial Association be requested to give prizes for the best apple-puller, apple-packer, apple-parer and apple-dryer, and that the Directors of this Association see that the above be carried out and tested." Carried.

Mr. P. C. DEMPSEY read a paper on summer varieties of apples. Among others he mentioned the Early Harvest Red Astrachan, Benoni, Primate, Colvert, Duchesse of Oldenburg, Gravinstein, St. Lawrence, Beauty of Kent, Norton's Melon, Fullawater, Baldwin, Hubertson's Non-such, King of Tompkin's County, Northern Spy, R. I. Greening, Golden Russet, Westfield Seek-no-further, Ben Davis, and some others.

On motion a vote of thanks was tendered to Mr. Dempsey.

Mr. GOTT, of Arkona, Lambton county, referred to the statement (in Mr. Dempsey's paper) that the Northern Spy tree was tender, and the bark liable to crack and canker. That was something unknown in this section of the country.

Mr. DEMPSEY said this statement was made from experience gathered in Prince Edward county.

The name of Mr. Allan was placed on the committee list on new fruits.

Mr. BUCKE moved, seconded by Mr. Beall, that the directors be requested to engage the services of a first-class shorthand reporter to take down the discussions at the next winter meeting, to be submitted to a press committee before publication.

Mr. ANDERSON moved in amendment that the Society did not require a special reporter, which was lost and the original motion carried.

Mr. WOODWARD cautioned the Association against buying the Niagara Grape, as no one but the Niagara Grape Company, of Lockport, had that grape, and he would be glad to welcome all the members of this Association to the Company's grounds. On behalf of the Western New York Horticultural Association he extended a hearty invitation to come over to the next meeting of that Association.