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COLUMBIA SKETCHES.

Yale and Emory on the Canadian Pacific Railway.

New Towns and Busy People.

Shortly before nightfall the gallant steamer blew her unearthly whistle again, the lines were loosened, and she swung out into the stream and proceeded on the way to Yale, writes a correspondent of the Victoria *Colonist*. Before darkness had fairly set in the Two Sisters—twin rocks that rear their heads in mid-channel—were reached. At least they used to rear their heads, but the Dominion Government sent a party who knocked off the head of one Sister with giant powder, and her shoulders are only visible at low water. The water here riots in a spirit of sheer wantonness, and dashes and foams with the ferocity of ten thousand furies against the stony-hearted damsels. No use. The Sisters are immovable. There they stand as they have stood for centuries, receiving the assault and turning aside, dividing and beating into spray, the rushing waters. The Irving enters the foaming current. She sits like a cork on the surface, yet trembles like a leaf, while the ponderous wheel astern revolves with the utmost rapidity. For an instant the steamer hangs as on a pivot, evenly balanced. The hungry waters rush on in anticipation of their prey, and every whirl seems a maelstrom impatiently waiting open-mouthed to engulph the Irving and her load. The pause is but momentary. Slowly she forges ahead, and presently leaves the Sisters far behind, with the river lashing itself into foam against their rocky sides. A few hundred yards further on, and the Irving is run into the bank, and tied up for the night. At dawn off we go again. At five o'clock a pause is made to land some heavy mining machinery near Emory City, which being done we glide on. At seven o'clock we climb Sawmill riffle, turn a sharp curve in the river, and

THE TOWN OF YALE

lies before us. Seen from the steamer the chief characteristic of the town is its newness. New buildings, new fences, new streets. We land, and crowds, of new faces line the bank, occupy the stores or fill the streets. The town is full of people. They fill hotels, saloons and business houses; they crowd the sidewalks and line the streets. The merchants are doing a good business. There are four or five liquor licenses in the town, and the lucky holders are making rapid fortunes. Yesterday was pay day, and the "boys" with a month's wages burning holes in their pockets are making matters lively, keeping the constable's hands full of business and giving the honorary J. P. (Mr. Deighton) no opportunity to attend to his legitimate calling. But with all the noise and drunkenness there is very little crime. The offences are generally trivial, and are squared by the payment of a light fine. On all sides is heard the sound of hammer and saw. In every direction buildings are under weigh. The black scars caused by the recent fire are nearly obliterated, and in the course of a very few days there will be naught save the memory of losses to remind even the sufferers of the catastrophe. Business, as we have said, is brisk. People don't walk at Yale—they rush. Yale is no place for a gentleman of leisure. From "peep o' day" till long into the night the movement of men, horses, and waggons along the one business street goes on with scarcely any intermission. As we gaze at the hurrying throngs we wonder how on earth they all find beds, or even space in which to lie down when at last they seek repose. It seems that the sides of the buildings must burst from the plethora of inmates. After breakfast we walk to the edge of the bank and gaze at the rushing river as it fretts and fumes on its way to the sea. The scene is picturesque and beautiful; the landmarks of long ago are unchanged, but the grating of the rocker and the sound of the gravel as it whirled through the sluice-boxes of the miners are no longer heard. The mining interest exists no more. "Worked out" is the verdict of every man who nowadays washes a pan of gravel on Yale bar. The miners whose perseverance converted Yale bar into a hive of industry are gone, and only the "tailings" remain to mark the spot where a thousand men once courted the smiles of the fickle goddess. The experience of Yale bar is the common experience of every bar along the river. Hill's bar, where flour gold was found in great abundance, is deserted, and Emory bar has been laid out as a city with wide streets, public squares, market places, and waterworks. The future of other deserted bars does not appear so promising; but who would venture to sketch their career when the iron horse shall have pranced and snorted past their doors? Yale is indeed much improved, and what strikes the visitor as most peculiar and extraordinary is the large number of Victorians he meets—nearly all following some pursuit. If Victoria's late floating population is here, it is at least a comfort to know that they are all usefully employed in some capacity, and that the city street-corners which once knew them will know them no more.

EMORY CITY.

From Yale to the terminal point of the Yale-Savona railway is four miles. The British Columbia Express Company supply the horses, the waggons, and the driver, and we are off for Emory. On the road are seen many evidences of the progress of railway work. Numerous gangs of busy workers are engaged drilling, blasting, and grading. In many places the road-bed is finished, and it is said that by November the road from Yale to a point one mile below Emory will be ironed and ready for the rolling stock. The work is of a heavy, substantial character—quite English in that respect—and when completed the railway will be one of the safest on the continent. We pass the railway powder magazine, which is in the custody of an old and respected Victorian, and after a most delightful drive over an excellent road reach the suburbs of the new town. We cross a substantial bridge which spans Emory Creek—a stream of cool, clear water, babbling merrily as it comes over the boulders and gravel. The little boaster passes swiftly between high banks, and a few hundred feet below plunges abruptly into the arms of the Fraser—the centre of attraction of all mountain streams on this watershed, and is instantly swallowed up. On the opposite side of the bridge a pleasing and unexpected sight meets the eye. It is a saw mill—a veritable steam saw mill—in active operation. How the saws revolve and the chips fly as the monarchs of the forest are collared by strong hands, bound to the carriages, and rent into required shapes. How like criminals condemned to the guillotine the logs seem as they are pushed forward, and the resistance offered to the saws as they enter the wood seems like a protest raised against the cruel treatment. The capacity of the mill is 23,000 feet per day; but the demand exceeds the supply, and the proprietors, Messrs. Gray, Hoy & Co., recently of New Westminster, are about to harness the water of the saucy little brook, and utilize it to double the capacity of their establishment, which is in a complete form and fitted with every modern appliance requisite to success. Some 30 hands are employed here, and a look through the establishment shows that thrift and careful management preside over its operations. Into the waggons again, and after a drive of a couple of hundred yards we come to—a printing office! If the saw mill appeared like a "surprise party" in our eyes, the spectacle of a printing office in this charming spot was a revelation.

Not long ago a new railway was opened in the Highlands. A Highlander named Donald heard of it, and bought a ticket for the first excursion. The train was about half the distance to the next station when a collision took place, and poor Donald was thrown unceremoniously into a park. After recovering his senses he made the best of his way home, when the neighbours asked him how he liked his drive. "Oh," replied Donald, "I liked it fine, but they had an awful quick way in puttin' me oot."

FARM AND HOUSEHOLD.

ENSILAGE.

TIME WHEN FORAGE PLANTS CONTAIN THE GREATEST AMOUNT OF NUTRITIVE VALUE.

A great advance has been made within a few years in agricultural knowledge; and among the most valuable facts learned has been this, that grass contains a greater amount of nutrition when in blossom than at any time before or afterwards.

What is true of the common grasses, viz., timothy, red-top, orchard-grass, and clover, is equally true of corn, which is but a gigantic grass.

If, then, a stalk of corn contains at the time it blossoms more nutritive value than at any subsequent time, how foolish and wasteful to let it stand for the ear to form at the expense of the stalk, while at the same time great loss is going on from the leaves and the stalk, as is the case with other and smaller grasses.

The seed formed in the head of a stalk of timothy or other grass—while very rich and nutritious in itself—does not by any means compensate for the loss which has been sustained by the stalk and leaves while the seed is forming and ripening.

The loss which is sustained in the ripening process is not all. By expending a great amount of labour the corn is shucked and put in the cribs. There it suffers more or less from the depredations of rats, mice, and other vermin.

We re-shock or stack the corn-fodder. If we hope or expect to induce our cattle to eat much of the stover, we must cut it with a powerful cutter; next the corn must be ground, and carefully mixed with the cut corn-fodder. Then it must be steamed; and after all this labour and expense the stock will rose it about in their mangers, and leave enough of it to keep themselves well bedded. Now what do we accomplish by all this shucking, cribbing, grinding, cutting of the fodder, mixing and steaming. Why, we have been getting up a very poor quality of "Ensilage!"

After the stalks and leaves had become almost worthless by exposure to the rains and dews while the ripening of the ears was being accomplished, we then, by an expensive, laborious, and roundabout way, try with all the appliances of steam and machinery to get the corn back into the stalks so that we can induce our cattle to eat them.

Why not take and preserve the plant when its nutritive value is the greatest? when all its valuable elements are mixed and blended in an harmonious whole exactly adapted for the healthy sustenance of our domestic animals, by that Master Chemist whose handiwork as seen in the tiniest leaf is so far in advance of our most skilful combinations that we can never even hope to comprehend how it was formed from the original elements.

It will be almost unnecessary to state that this system of preserving corn-fodder is equally well adapted to all the grasses, clover, Hungarian grass, millet, pea and bean vines, and, in fact, to all kinds of forage-crops, particularly heavy crops of aftermath, which it is often impossible to cure by drying, owing to the lateness of the season, the sun by the obliquity of its rays having lost much of its potency.

There is no doubt in my mind that there is more available nutrition in a kernel of grain when it is fully grown, before it has had time to harden, before a part of its substance has been converted into a hard, tough envelope which is almost indigestible, than at any subsequent time. This hard protecting envelope is a wise and providential provision to protect the kernel as a seed for future crops. Heretofore no means have been known to preserve grain except by ripening and drying, nor to cure forage crops except by drying: since Ensilage has been proved practical, we may now harvest all our crops when they contain the greatest available amount of nutritive elements, and preserve them unimpaired indefinitely. In this view of the object of ripening grain, the conclusion is irresistible that the nutritive some in corn and other grain is not to be found at or before the blossoming period, as it is in the grasses.

It is by no means certain, so far as the kernel of grain itself is concerned, that the ripened grain contains as large an amount of available nutritive elements as it does when in the milk. I have often observed that pigs when fed upon soft corn grow better than when fed upon old corn. Experiments in feeding swine at the West, reported in "The National Live Stock Journal," show this.

EXPLANATIONS WHY ENSILAGE MUST KEEP.

Many farmers and others came to see the process of filling the Silo with the green corn-fodder; nearly all declared that it would spoil, mould, heat, and rot. Several said, "I guess you will have a fine lot of manure before winter." I replied, "Gentlemen, it will not spoil at all; it will not even heat: it will come out just as good feeding stuff as it is now, and I think better."

None of them believed a word I said, it was plain to be seen. They were certain that this last of my "new-fangled notions" would prove a complete failure, and they would have the laugh on me this time. Some endeavoured to cheer me up by saying that "even if it did not work well for the purpose I intended, the Silos would be a capital place to store fruit in, so that it won't be all loss, any way."

This kind of talk had been going on for several days, and was, I confess, getting to be rather monotonous. One day a number of well-meaning but incredulous neighbouring farmers were present. They knew nothing of agricultural chemistry, or the philosophy of its preservation; but I made up my mind I would convince them that the green corn-fodder would keep instead of rotting: therefore I said, "You think it will heat and spoil, do you?"—"Yes. I am afraid it will," said they, each and all."—"Now, I tell you it won't do any such thing." "Why won't it? what makes you think so?" they asked. I knew that I might quote M. Goffart, and all the agricultural scientists in the world to them till doomsday, and it would have no impression on their minds, so I took homely illustrations. Said I, "Why doesn't a pile of horse-manure heat when it is left in the stable all winter under the feet of the horses, until it gets three or four feet deep? Why doesn't sheep-manure heat when it is left all winter in the sheep-folds, and becomes a foot and a half to two feet deep?"—"Because it is trod down so solid, the air can't get into it."—"Just so! that is the reason this corn-fodder won't heat and spoil: it is 'trod down' so solid that the air can't get into it." I rejoined. This was rather a staggerer. "Is there anything which is quicker to heat when it has a chance than horse or sheep manure?" I asked. "No-o-o," they reluctantly admitted. "Now see here," said I: "haven't you all noticed in the spring, when you were getting out your hog-manure, that you often came across, in the bottom of the yards, buried under the manure, potato-vines and weeds which had been thrown into the hogs the fall before, that were just as green and fresh as when they were first pulled out of the ground?" They all replied, "Yes we have."

"Well," said I, "My Ensilage will keep just the same way. I trample it down solid as it is put in the Silos, cover it with rye-straw, then floor it over with plank, and put about a foot in debth of cobble-stones or boulders which will press it down solid as a cider-cheese. No air can then get in. The air and gases already in will be continually being forced out by the weight. Therefore it cannot heat any more than the horse and sheep manure can when it is trodden down compactly." They were silenced.

Pretty soon one old farmer who has got a great deal of good, hard, sound sense in his head, slowly looked round, and still more deliberately said, "By Horn, I've changed my mind! I believe it will keep. But you will have to feed it all out before the weather begins to get warm in the spring, won't you?"—"No," I replied: "the outside temperature has nothing to do with its keeping. Won't a pile of horse or sheep manure 'heat' and 'burn' if it lies up loose so that the air can get at it in the winter, be it ever so cold, just as badly as in the hottest days of summer?"

"Well, there ain't much difference," said he. "Now, it is just the same with Ensilage," I replied. "If it does not 'heat' in the winter, it will not in the summer. It is the presence of air, or rather of the oxygen in the air, which causes manure or any damp mass of organic matter to ferment or decay."—"Well," said he, as he started for his team, "as I said afore, I believe it will come out all right." The rest of them said nothing; and whether all of them have found out to this time that it does keep, or not, I am unable to say. One thing is certain; they were silenced for once.

Now, my explanation why it keeps, and why it is somewhat sour, is this:—

When it is cut over so fine, and trodden down ever so vigorously, still there is some air left in the little spaces between the pieces of the stalks; and the dried leaves, if there are any, are full of air which has taken the place of the sap which has evaporated. Large stalks, after being cut four-tenths of an inch long, are finer than small ones; which is one reason among several why the corn which grows the largest is the best for Ensilage. The oxygen in this amount of air—be it greater or smaller—immediately starts a fermentation. Fermentation, mould, decay, rot, and fire are all identical. The only difference is in the degree of speed with which the combustion goes on. They all alike depend upon the presence of oxygen, and cease when this active agent of destruction is removed. The process of combustion, whether slow or rapid, consumes oxygen, and gives out carbonic acid gas.

This fermentation consumes the small amount of oxygen which is contained in the mass of Ensilage, and liberates an amount of carbonic acid gas which takes the place of the oxygen. The fermentation in its incipient stage is arrested for want of oxygen. None can get in from the top; for the compression which is constantly going on is all the time forcing the gases out, and where there is ever so slight a flow out, none can possibly flow in. Then, as the carbonic acid gas is heavier than the atmosphere, the sides and bottom of the Silo being tight, and as the carbonic acid gas cannot leak out, the air cannot get down into the space occupied by the carbonic acid gas, any more than air can get down into a jug filled with water or other heavy liquid until the water or other liquid is poured or leaks out. The Ensilage is thus immersed in a bath of carbonic acid gas. Fermentation under such circumstances is an impossibility.

(To be Continued.)

The Cost of Road-Repairing.

Every one who knows the French highway roads will admit without hesitation that they are maintained in a style that would do credit to any country, and altogether put to shame the road commissioners of Loamshire and Sandyshire. A French statistician gives an exact account of the quantity of stone required to keep these roads in their present excellent state, and the consequent cost therein involved. The roads of France are divided into three separate categories, no one of which is ever mistaken for another. The *routes nationales* are the most important, and are easily distinguishable by their great breadth, and the care with which they were evidently laid out at first. They contain in all 37,000 kilomètres, or about 20,000 miles, and the annual cost of repairing them is about 31 millions of francs. The departmental roads stand next on the list, and contain 41,000 kilomètres, maintained at an annual cost of 20 million francs. Finally, there are the *chemins vicinaux*, not dignified with the name of routes at all, and sometimes little more than lanes. These contain 260,000 kilomètres, and involve an outlay every year of 75 millions. Taking an average of the amount of stone annually required to be broken and laid down on each kilomètre of road, it is found that it amounts to 23 cubic yards, and each such metre costs on an average a sum of 6fr. 70c. It is calculated that the total quantity of stone laid down every year on the French roads would, when reduced to cubes, make a pile 800 feet high and about 240 yards in diameter, and that if the dust in question were spread on an uniform level over all the roads, it would reach a level of about six millimètres, or the fifth part of an inch. And this amount of pulverisation is, of course, supposed to actually take place every twelvemonth in order to involve the replacement of it by the new stones, as already mentioned. The French are thus a long away ahead of us in the matter of highways, although the consumption of turnpikes is altogether unknown. It is, of course, partly with a view to military operations that the principal roads are kept up in their present state. The same reason accounts for the directness with which they pass from great town to great town, and which robs them to some extent of their picturesqueness. This defect is, however, partly made up for by the custom that almost invariably prevails of planting the *routes nationales*, like boulevards, with rows of trees.—*London Globe.*

Farm Work in September.

September is usually considered the month for beginning the autumn harvests, but it is also the seed-time for winter grains, and, if these are not already sown, they claim attention prior to all harvests. If rye and wheat are not sown by the latter part of August or the first of September, the sowing had better be deferred till just before the ground freezes, or even till spring, as it is better not to have the seed germinate at all in the autumn than to have the roots get so feeble a hold as to be thrown out of the ground by the alternate freezings and thawings of winter. We have known very good success to follow the sowing of these grains just as the winter sets in, but the better way is to sow in such season that the roots will get a firm hold and the blades such a growth as in a measure to protect the roots, but not enough to smother them. We notice some farmers putting in their winter grain in August so as to get some fall feed for their sheep. The grazing of the grain fields will effectually prevent all smothering of the roots, but the remedy is worse than the disease. The sharp hoofs of the sheep, and their still sharper teeth, are poor pruning tools for tender grain. They cut and bruise too near "the quick" of the plant. Winter grains are rather precarious at their best, but if sown in September, previous to the equinoxial rains, they stand the best chance for making a return of sixty to a hundred fold.

One of the crops first demanding the attention of the farmer this month is that of apples, which in most parts of our country is unprecedentedly early, large, and fair. The trees are so loaded with fruit that they are breaking down, and the branches must be propped to prevent great mutilation of the orchards. The early apples are falling in such quantities as to preclude the possibility of feeding them to stock—except where the flocks and herds are in equal ratio with the orchard—or doing much with them but to make them into cider vinegar. As for making cider in September—certainly in the early part of the month—that is worthy of the name, it is out of the question, without more pains than most farmers are willing to take. If any one has a very cool cellar in which the thermometer ranges from 40 to 50 deg., so as to check the vinous fermentation from running straightaway into the acetous, cider may be kept in a tolerable condition, but the early made is a flashy article in comparison with that pressed the latter part of October. It however makes a very respectable vinegar, and if the casks are left in the open air with an inverted bottle in the bung-hole, the acetous will follow the vinous fermentation in rapid succession. The vinegar will be all the better if a pint of molasses or a pound of sugar be added to each barrel, as early apples seldom have sufficient saccharine matter in them to make a No. 1 article of vinegar.

There is also the corn to harvest. Buckwheat must also be harvested before frost, but the harvest should be deferred as late as possible, as this grain blossoms and matures by a slowly-ascending scale, blossoming a long time and maturing a long time. The plant has a peculiar branching growth, sending forth new branches after the first have blossomed, so that mature grain and fresh blossoms are found on the same plant. This grain shells out very early, and, to avoid loss from this cause, it is better to harvest it in a lowery day, and put it in little bunches, giving a pig-tail to the top of the bunches to hold them together and keep out the rains. The straw of buckwheat is so succulent that it is apt to heat if stored in the barn, even though it may seem dry enough to be housed. The better plan, therefore, is to thrash as it is hauled to the barn, or to take the thrasher into the field and save long haulings and no little waste of grain.

Though September is a busy month on the farm, it is the season usually selected for farmers' fairs, and no one interested in agriculture can afford wholly to neglect these exhibitions.—*Alexander Hyde in New York Times.*

FARM FACTS.

White Russian wheat, cut from the farm of Mr. T. Tremeer, in the French settlement, Tiny, give heads nearly twice the length of the ordinary club or fife wheat, and the grain large and plump. It is estimated that the field will yield sixty bushels to the acre.

In order to encourage agricultural development on the Atlantic coast, the port of Santo Tomas, in the department of Izabal, has been declared free for one year, for the introduction of provisions, tools, &c., of those who wish to engage in agricultural enterprises. Several parties have determined to establish the cultivation of the banana in the district on a large scale, planting from 20,000 to 50,000 plants each. Transportation for the product to New Orleans will be furnished by the steamers which visit the northern coasts of Guatemala and Honduras, which have already commenced the cattle and fruit trade with a favourable result.

Mr. Lauder, at Whitby, has collected a number of samples of two-rowed barley of this year's growth, gathered from the lake shore, about Oshawa, and also from about Foley. He mixed up the samples in order that a fair average sample may be produced, has sent it to England, and expects to get an order for all two-rowed barley in that part of the county which is up to that standard. A good price is expected, and it is hoped that this is but the beginning of an important barley trade with England.

Apples are a drug on the farmers' and fruit-growers' hands and they say it does not pay to ship the crop to market. The yield is unprecedented. The fruit has a fine colour, large size, and the flavour is exceptionally fine. Fruit-drying factories, principally for apples, are being opened on both sides of the river. In Southern Ulster alone, not less than five new establishments commenced running this week, and others will begin operations during the course of a few days. Next season will be the "off year" for apples, and the far-seeing producers, instead of shipping the fruit to the New York, Philadelphia and Boston markets, are having hundreds of bushels dried daily. They purpose to keep the dried stock until next year, when they believe good prices will be obtained. The fruit-drying factory proprietors are paying from 10 to 15 cents per bushel for fair varieties, and still higher for better grades. There are few farmers selling their crops at the figure quoted. They say that their "seconds" are worth more money, and prefer feeding them to their stock. Cider mills are starting up, and "dead fall" are selling for a song. The quantity of cider which will be manufactured this fall will be enormous. The mill owners take the apples on shares. The cider-maker does the labour and divides the cider with the farmer.—*New York Times.*

The most striking feature of the dairy ranch of S. S. Clough, San Mateo Canon, Cal., is the new dairy-house which Mr. Clough recently completed at a cost of $1,500. A receiving vessel, fitted with a strainer, is in the milking yard, and communicates by a pipe with the dairy-house. The milkers pour their milk into this receiver, and that is the end of their duties. The milk passes down through the pipe to a 200-gallon tank in the dairy-house, whence it is drawn by the dairymen, undergoing meanwhile a second straining process. It is then placed in pans to cool and raise the cream. Water is brought in pipes through the house from a mountain spring. The churn holds 52 gallons of cream, and turns out from 100 to 120 pounds of butter at each churning. It is worked by goat power, the appliances being a treading wheel, 18 feet in diameter, which connects with and operates a shaft running into the dairy-house, and this turn connecting with cog-wheels working the dashers. Mr. Clough says that the goats, in operating the wheel, indulge their natural propensity for climbing, and they apply themselves to the work with great gusto.

French forestry has accomplished wonders of late years. The blue-gum tree has been planted extensively in the South of France, and the marshes at the mouth of the Var have been drained, and the fevers prevailing there have been ended by planting this tree. The American oak has been used in poor soil to prepare the way for better trees. The California theya tree, the wood of which is used for fine furniture, is now planted as an experiment. Wind-blown hilltops have been covered with shrubs and trees by building weirs in the mountain gorges and gradually cultivating vegetation upwards. The Torrent du Bourget is one of the best examples of this reforestation. In 1868 it was only a ravine of bare rocks. The hollow has since been half filled by high stone dams. Trees and bushes are growing to the very edges of the ravine. The torrent is now quieter and has never since devastated the valley below with periodical inundations, as was formerly the case. From 1861 to 1877, 68,000 acres were planted with trees and 3,700 additional acres turfed at an expense of $1,725,000. The reclamation of sand drives is accomplished by building strong fences and planting meadow-grass, sedges, broom, or espartero grass in the lee of the masses formed by the shifting sands against the fences.

DOMINION EXHIBITION.

Programme During the Show at Montreal —A Long List of Attractions.

MONTREAL, Sept. 3.—The following is the list of attractions settled upon by the Exhibition Committee:—

Tuesday, 14th Sept.—Opening of the industrial part of the Exhibition, and of the horticultural show in the Victoria skating rink.

Wednesday, 15th Sept.—Second day of the industrial and horticultural show; display of fireworks in the evening.

Thursday, 16th.—Third day of the industrial and horticultural shows. First day of lacrosse tournament on one of the lacrosse grounds.

Friday, 17th.—Industrial Exhibition. The horticultural show ends this day. Second day of the lacrosse tournament. Display of fireworks in the evening.

Saturday, 18th.—Industrial Exhibition continued. Lacrosse match between the Montreal and Shamrock clubs. Races at Lepine Park.

Monday, Sept. 20—Industrial Exhibition. First day of agricultural show. Grand sailors' concert in the Victoria skating rink. Torpedo display.

Tuesday, Sept. 21.—Grand formal opening of the Exhibition by his Excellency the Governor-General. Grand *fête* and picnic of the Irish Protestant Benevolent Society on the Shamrock lacrosse grounds. Oddfellows' and Dezouche's grand vocal and instrumental concert. Industrial and agricultural shows. First day of the dog and pet stock show in Shaw's sale-rooms.

Wednesday, Sept. 22.—Dominion Exhibition. Industrial and agricultural shows, etc. Caledonia Society's grand competition in athletic games, feats of strength, speed, endurance, &c. Second day of the dog and pet stock show. Fireworks' display.

Thursday, Sept. 23.—Dominion Exhibition, industrial, agricultural, &c. Third day of the dog and pet stock show. Grand review of the fire brigade. Races at Lepine Park. Military torch-light procession and fire-works.

Friday, 24th.—Industrial and agricultural exhibition. Races at Lepine Park. Fireworks.

Besides these there will be every day pilot, captive, and free balloon ascensions on the Exhibition ground by Prof. Grimley, of New York; an art exhibition in the Art Gallery, Phillips square, open day and evening, and the Museums, etc., will be open. There will be a military review and an illumination of all the ships in port, one of the grandest sights of the whole programme.

AGRICULTURAL FAIRS.

The Fall Exhibitions for 1880—Dates and Localities.

Name of Fair.	*Place where Held.*	*Date.*
Industrial Exhibition,	Toronto,	Sept. 6-18.
Ontario County,	Whitby,	Sept. 8-10.
South Leeds,	Delta,	Sept. 14-15.
Mount Forest Horticultural,	Mount Forest,	Sept. 14-17-20
Dominion Exhibition,	Montreal,	Sept. 14-24.
Tuckersmith,	Seaforth,	Sept. 15-17.
East Zorra,	Tavistock,	Sept. 17.
Provincial,	Hamilton,	Sep. 20-Oct. 2
South Huron,	Exeter,	Sept. 20-21.
Southern,	Brantford,	Sept. 20-24.
Halifax,	Halifax,	Sept. 20-24.
Wilmot,	Hamburg,	Sept. 21-22.
Central Fair,	Guelph,	Sept. 22-23.
Turnberry Branch	Wingham,	Sept. 22-23.
Normanby,	Ayton,	Sept. 23.
West Huron,	Goderich,	Sept. 23-24.
North Perth,	Stratford,	Sept. 23-24.
Hay Branch,	Zurich,	Sept. 23-24.
Blenheim,	Drumbo,	Sept. 23-24.
Greenock,	Pinkerton,	Sept. 24.
Nova Scotia, Provincial,	Kentville,	Sept. 27.
Mitchell,	Mitchell,	Sept. 27-28.
Elma,	Newry,	Sept. 28.
Pickering,	Brougham,	Sept. 28-29.
Beaubrick,	Hanover,	Sept. 28.
Southern Counties,	St. Thomas,	Sept. 28-30.
Union Exhibition,	Paisley,	Sept. 28-30.
West Wellington,	Clifford,	Sept. 28-29.
Minto,	Harriston,	Sep. 29-Oct. 1
North Victoria,	Victoria Road,	Sept. 29.
South Grey,	Durham,	Sept. 30-Oct. 1
East Simcoe,	Orillia,	Sept. 30-Oct. 1
Huron,	Ripley,	Sept. 29-30.
Kings Co., P.E.I.,	Georgetown,	Sept. 30.
Sherbrooke,	Sherbrooke,	Sept. 30.
Elma & Wallace,	Listowel,	Sep. 29-Oct. 1
Melanchton,	Shelburne,	Sep. 30-Oct. 1
N. Waterloo,	Berlin,	1st wk. Oct.
Howard,	Ridgetown,	Oct. 1-2.
South Victoria,	Lindsay,	Oct. 1-2.
Wellesley,	Linwood,	Oct. 1.
West Gwillimbury,	——,	Oct. 4-5.
Western,	London,	Oct. 4-8.
Midland Central,	Kingston,	Oct. 5-8.
Egremont,	Holstein,	Oct. 5.
Northern,	Walkerton,	Oct. 5-7.
West Simcoe,	Barrie,	Oct. 5-6.
Nassagaweya,	Brockville,	Oct. 5.
Central,	Port Hope,	Oct. 5-7.
Provincial, New Brunswick,	St. John,	Oct. 5-8.
Peel, Maryboro' & Drayton,	Drayton,	Oct. 5-6.
North Brant,	Paris,	Oct. 5-6.
East Huron,	Wroxeter,	Oct. 5-6.
Townsend,	——,	Oct. 5-6.
West Hastings,	Belleville,	Oct. 5-6.
Lennox,	Napanee,	Oct. 5-6.
East Wawanosh,	Belgrave,	Oct. 5.
North Hastings,	Garners, Huntingdon,	Oct. 7.
Eramosa,	Rockwood,	Oct. 6.
Proton,	Dundalk,	Oct. 6.
Eldon,	Woodville,	Oct. 6.
South Simcoe,	Cookstown,	Oct. 7-8.
Cookstown,	Cooks'own,	Oct. 7-8.
Northern Union,	Orangeville,	Oct. 7-9.
Alliston,	Alliston,	Oct. 7.
Grey Branch,	Brussels,	Oct. 7-8.
Puslinch,	Aberfoyle,	Oct. 8.
South Norwich,	Otterville,	Oct. 8-9.
Springfield Horticultural,	Springfield,	Oct. 9.
East Kent,	Thamesville,	Oct. 11-12.
Provincial, P.E.I.,	Charlottetown,	Oct. 12-13.
Morris Branch,	Blyth,	Oct. 12-13.
South Perth,	St. Mary's,	Oct. 12-13.
East Peterboro'	Norwood,	Oct. 12-13.
East Flamboro',	Carlisle,	Oct. 12.
Romney,	Wheatley,	Oct. 12.
South Wold & Dunwich,	Iona,	Oct. 12.
Raleigh,	Raleigh,	Oct. 12.
Beeton,	Beeton,	Oct. 12-13.
Burford,	Harley,	Oct. 12-13.
Stanley Branch,	Bayfield,	Oct. 12-13.
North York,	Newmarket,	Oct. 12-13.
Mariposa,	Oakwood,	Oct. 12-13.
North Ontario,	Uxbridge,	Oct. 12-13.
Schomberg,	Schomberg,	Oct. 13.
West Kent,	Chatham,	Oct. 13-14.
West Elgin,	Wallacetown,	Oct. 14.
West Peterboro',	Peterboro',	Oct. 14-15.
Blanchard,	Kirkton,	Oct. 14-15.
Tossorontio,	Rosemont,	Oct. 15.
Addington County	Newburg,	Oct. 16.
Erin,	Erin,	Oct. 19-20.
Camden and Dresden,	Dresden,	Oct. 19-20.
Woolwich,	Elmira,	Oct. 19.

USEFUL RECEIPTS.

SWEET PICKLED BEETS.

Boil them in a porcelain kettle till quite soft, when cool, cut lengthwise to size of a medium cucumber; boil equal parts vinegar and sugar with half a table-spoon ground cloves tied in a cloth to each gallon; pour boiling hot over the beets.

PICKLED CUCUMBERS.

Prepare and quarter ripe cucumbers, take out seeds, clean, lay in strong brine nine days, stirring every day, take out and put in clear water one day, lay in alum-water (a lump of alum size of a medium pulled hickory-nut to a gallon of water) over night, make syrup of a pint good cider vinegar, pound brown sugar, two table-spoons each broken cinnamon bark, mace, and pepper grains; make syrup enough to cover the slices, lay them in, and cook till tender.

RIPE CUCUMBER PICKLES.

Cut large, ripe, solid cucumbers in rings, pare, divide into smaller pieces, and remove the seeds; cook pieces very slightly in weak vinegar, with salt enough to season well, drain, and put in a stone jar in layers with a few slices of onions, some cayenne pepper, whole allspice, whole cloves, bits of cinnamon bark, and celery seed (according to taste) between each layer of cucumber. Then cover with a syrup made of one pound sugar to one quart cider vinegar, boiled for about five minutes. Cover closely, and set in a cool place.

SPICED CURRANTS.

Six pounds fruit, three of raisins, three of sugar, one pint vinegar, two table-spoons allspice, two of cinnamon, and one of cloves.

PICKLED GRAPES.

Fill a jar with alternate layers of sugar and bunches of nice grapes just ripe; fill one-third full of good old vinegar, and cover tightly.

SPICED GRAPES.

Five pounds grapes, three of sugar, two tea-spoons cinnamon and allspice, half tea-spoon cloves; pulp grapes, boil skins until tender, cook pulps and strain through a sieve, add to the skins, put in sugar, spices, and vinegar to taste; boil thoroughly and cool.

SPICED GOOSEBERRIES.

Leave the stem and blossoms on ripe gooseberried, wash clean; make a syrup of three pints sugar to one of vinegar, skim, if necessary, add berries and boil down till thick, adding more sugar if needed; when almost done, spice with cinnamon and cloves; boil as thick as apple butter.

SPICED NUTMEG MELON.

Select melons not quite ripe, open, scrape out the pulp, peel, and slice; put the fruit in a stone jar, and, for five pounds fruit, take a quart vinegar, and two and a half pounds sugar; scald vinegar and sugar together, and pour over the fruit; scald the syrup and pour over the fruit each day for eight successive days. On the ninth, add one ounce stick-cinnamon, one of whole cloves, and one of allspice. Scald fruit, vinegar, and spices together, and seal up in jars. This pickle should stand two or three months before using.

PEACH PICKLES.

Pare freestone peaches, place in a stone jar, and pour over them boiling-hot syrup made in the proportion of one quart best cider vinegar to three pints sugar; boil and skim, and pour over the fruit boiling hot repeating each day until the fruit is the same colour to the centre, and the syrup like thin molasses. A few days before they are finished, place the fruit, after draining, in the jar to the depth of three or four inches, then sprinkle over bits of cinnamon bark and a few cloves, add another layer of fruit, then spice, and so on until the jar is full; scald the syrup each morning for three or four days after putting in the spice, and pour syrup boiling-hot over fruit, and, if it is not sufficiently cooked, scald fruit with the syrup the last time. To pickle clingstones, prepare syrup as for freestones; pare fruit, put in the syrup, boil until they can be pierced through with a silver fork; skim out, place in jar, pour the boiling syrup over them, and proceed and finish as above. As clings are apt to become hard when stewed in sweet syrup, it may often be necessary to add a pint of water the first time they are cooked, watching carefully until they are tender, or to use only part of the sugar at first, adding the rest in a day or two. Use the large White Heath clingstones if they are to be had. All that is necessary to keep sweet pickles is to have syrup enough to cover, and to keep the fruit well under. Scald with boiling syrup until fruit is of same colour throughout, and syrup like thin molasses; watch every week, particularly if weather is warm, and if scum rises and syrup assumes a whitish appearance, boil, skim, and pour over the fruit. If at any time syrup is lacking, prepare more as at first.

LINES FOR LADIES.

The pottery craze seems to be subsiding in England, for blue china has fallen very much in price.

Byzantine work is much used for table covers, chair stripes, and screens; it is very oriental looking, and looks like imported work.

The deep pure white shells are used more for flower painting than those of flat surfaces, apple-blossoms and pansies being the favourites.

The Decorative Art Society has imported several Japanese designs for panels, and intends duplicating them and beginning them for customers.

If when bread is taken from the oven the loaves are turned topside down in the hot tins and are allowed to stand a few minutes, the crust will be tender and will cut easily.

Among the fur beaver or "brush plush" bonnets, which this fall will take the place of plain felt bonnets, none are so generally becoming as those with rolled brims.

Good housekeepers are just now up to their eyes in "preserving." The markets overflow with peaches, pears, plums, and grapes in numerous variety, while the yield of apples will be enormous.

Silver and gold spangles are used on nearly all kinds of fancy work, when the groundwork is plush or velvet, and add much to the effect when a rich and heavy look is desired, as in table and piano covers.

Notwithstanding the increase of new colours, old tints that have not been used for years are coming into fashion again. Among the latter are peach-blow, lilac, pearl colour, pale grey with pink tinges, maize, and pale rose.

San Francisco spends $150,000 on flowers annually. Three hundred persons are engaged in cultivating, arranging, and selling flowers, and the business of making nice designs occupies the whole