

a single tree, and five hundred barrels gathered of one variety. There are over six thousand apple, pear, peach and plum trees in the orchards. Besides orcharding, the proprietor, Mr. L. G. Harris, grows grain and hay extensively. The Annapolis Valley has long been known as one of the best apple-producing districts in the world, both as to flavor and keeping qualities of the fruit. Vast areas of orchards have been planted the last few years, and the acreage now in orchards is fast giving this Valley a place second to none as the scene of a successful and lucrative business in growing and exporting choice apples and pears. Though the fruit-growing industry in the Valley is only in its infancy, the exports at present are between five and six hundred thousand barrels annually, while in ten years it is expected they will easily pass the million mark.

NEWS OF THE DAY.

Canadian.

Rev. J. A. Mackay, a Canadian missionary, was drowned in the Essquibo River, British Guiana.

Mr. H. J. Rose, a McGill University student, now a Rhodes scholar attending Oxford University, has won the Craven and Ireland scholarships for this year.

The Board of Education in Brockville, Ont., will supply flags to every room in their schools, to be placed in a conspicuous position and saluted by the scholars each morning at the opening exercises.

U. S. Commissioner Kershaw, Inspector of Fisheries for Washington State, when visiting Vancouver said that Canada has the best hatcheries in the world.

The total exports of Canada for the five months ending November 30th of the current fiscal year, were greater by five millions than the total exports for the whole of the fiscal year 1895.

Two brothers, named Brooks, who were working on the construction camp of the new James Bay Railway, shot seventeen wolves in one night. The Province of Ontario allows \$15 bounty for the killing of a wolf.

Four Canadians will run for parliamentary honors in the forthcoming British elections. Mr. Homer Greenwood, Liberal candidate for York City; Mr. Foster Boulton, Liberal candidate for North Huntingdon; Mr. H. F. Wyatt, Unionist candidate for Russell, Nottinghamshire, and Dr. Rankine Dawson, son of the late Sir William Dawson, Conservative candidate for East Edinburgh.

British and Foreign.

Barton Hall, the American College for girls in Sen-tari, Turkey, was destroyed by fire.

An immense floating dry dock, made by the U. S. Navy Department, is being towed 12,000 miles, from Chesapeake Bay to the Philippine Islands. The voyage will take at least four months.

Field-Marshal Yamagata, of the Japanese army, has been appointed President of the Mikado's Privy Council.

The Prince of Wales, at Rawal Pindi, in the Punjab district, reviewed an army of 55,000 men, the greatest force ever assembled in India in time of peace.

The sailors of the schooner Carmencita, known as the Sea-Wolf, carried a fortune on board unknown to them. Geo. Schaer, one of the sealers, found a greasy substance floating on the water which proved to be ambergris, worth from \$10 to \$15 an ounce, and which he used for greasing his boots. Having used all he needed, he saved a bottle, and, on arriving at Seattle, took it to a druggist to find out what kind of grease it was, and was surprised at being offered \$78 for the bottle, which contained some five ounces of pure ambergris. Some pounds of the stuff had been used to rub down the masts and spars of the schooner.

Doings Among the Nations.

RUSSIA.

The general strike decided upon by the Russian Workmen's Council began at Moscow on December 20th, has since spread to St. Petersburg, and will affect the whole of the country. The preamble to the notice sent out by the strikers reads as follows:

"Citizens—Freedom or slavery? Is Russia to be governed by the people or robbed by a band of thieves? Let us stop industry, commerce and communications throughout the country, and with one united effort overthrow the last vestige of autocracy. To the whip, sword and machine gun let us oppose the revolutionary bayonet. Financial ruin threatens to engulf the Government. One more blow and the vile regime will be ended."

Trains loaded with troops on their way to the Baltic Provinces were stopped by insurgents, and some of

the soldiers were disarmed. On twenty-two railroads the employees have all gone out, and the last despatches state that a single telephone wire connected Moscow with the outside world.

THE FARM BULLETIN.



Mr. Geo. A. Robertson, St. Catharines, Ont.

President Ontario Experimental Union.

Forty thousand three hundred and ninety-six cars of wheat were examined in Winnipeg during the year ending August 31st.

Mr. W. R. Dewar, a graduate of the Ontario Agricultural College, has been appointed entomologist for the Agricultural Department in Cape Colony, South Africa.

The council of Aberdeen, Scotland, would have the Cattle Diseases Act amended for the admission of Canadian cattle.

The Minister of Agriculture has issued invitations for a congress in June, 1906, of fruit-growers to discuss questions of national importance. Provincial Departments of Agriculture and Agricultural Colleges are invited to send representatives.

Mr. W. Maw, Greenwood, Ont., writes: "Your paper is all right. I had an advertisement in it a short time ago for situation as farm manager, and it found me the job I was looking for, on the 200-acre farm of Mr. Arthur Johnston."

The Animal Husbandry Department of the Iowa Agricultural College will give a special course in the judging, breeding, feeding and management of horses, beef cattle, dairy cattle, sheep and swine, from January 2nd to January 18th, 1906.

The N. S. Fruit-growers' Association met, and after routine business appointed delegates to the Dominion Fruit-growers' convention, which will meet in Ottawa in June next. A resolution was passed, asking the Government to make the apple barrel a standard of measurement, and have but one size for all barrels throughout the Dominion.

It was recently announced that experiments, which have been made at Melun, encourage the hope that it will be possible to render cows immune against contagion from tuberculosis. It is now established that the efficacy of the vaccine lasts for a sufficiently long time. The milk of animals so vaccinated will be incapable of propagating tuberculosis.

Secretary Henry Wade, of the coming Clydesdale and Shire Show, says that the outlook for this year's show is a very good one, and the fact of having all the annual meetings of the various Horse Breeders' Associations that week will make it one of great interest, not only to the horse but the cattle breeders of this country. Mr. Wade is arranging a very interesting programme, and reduced rates will be secured, so that no doubt there will be a record attendance, not only at the horse show, but also at the various annual meetings.

Mr. C. W. Rubel, a member of the graduating class of the Animal Husbandry Department of the Iowa State College, has been appointed head of the Animal Husbandry Department of the California Polytechnic School, San Luis Obispo, California. This is an important position, and Mr. Rubel is well qualified for the work assigned him. Since graduating he has spent one year at the Iowa State College, assisting in the Animal Husbandry Department. Since the first of June, 1905, he has been in charge of one of the best stock and dairy farms in the State of Iowa. The demand for well-trained men along animal husbandry lines is growing greater each year. The Animal Husbandry Department of the Iowa State College has been called upon to fill six positions during the past year for every one five years ago.

Creamerymen Meet at Guelph.

A public meeting of the creamerymen of Western Ontario was held in the lecture-room of the Dairy School, Guelph, on Thursday afternoon, December 14th, and was well attended. The following programme was carried out: Chairman's address, Robt. Johnston, St. Thomas, President of the Dairymen's Association of Western Ontario; "Instruction at creameries, 1905," Geo. H. Barr; "Construction of cold storages," J. A. Ruddick, Dairy Commissioner, Ottawa; "Our butter in the British market," Prof. H. H. Dean, O. A. C., Guelph; "Different methods of churning and washing butter," Fred Dean, Creamery Instructor; "Pasteurizing cream at cream-gathering creameries," C. W. McDougall, Creamery Instructor.

Mr. Johnston congratulated the buttermakers on the improvement they had made in the quality of the butter in Western Ontario, and was glad to see so many present.

Mr. Barr stated that 71 creameries were in operation in Western Ontario during the past season, 12 more than in 1904. Of this number 53 were visited regularly by the instructors, who made from five to six visits to each. The instructors, besides visiting the creameries, visited over 1,000 farms from which cream was being sent to the creameries, with a view to improving the quality of the cream. The quality of the butter manufactured in the creameries in Western Ontario during the past season was the finest in the history of the trade. This was due, said Mr. Barr, to the work of the instructors at the creameries, and the fact that the butter had been sent forward for consumption as quickly as it was made. Very little butter was held for more than a week at the creameries. The cold storages at the creameries are in many cases only cold storages in name, 32 of them being reported by the instructors as being above 40 degrees temperature in July. This is one of the greatest weaknesses in the trade, as the best butter made would very soon spoil by being kept at a temperature of over 40 degrees.

Mr. J. A. Ruddick expressed great pleasure in meeting with the creamerymen of Western Ontario, and thought that meetings such as these did more to improve the quality of our dairy product than larger conventions. He said there was a decided improvement in the quality, style and finish of Western Ontario butter during the past season. Irish butter, said Mr. Ruddick, is the strongest competitor the Canadian butter has to meet, and if we are going to make much impression on the British market it is necessary to have a large quantity of butter, as well as to have it of good quality. One of the strong points in our Canadian butter trade is that we make pure unadulterated butter. He emphasized the necessity of keeping butter at low temperatures. The keeping quality of butter depends on the temperature at which it has been held. During the past summer he had made a number of experiments to determine the insulating qualities of different materials used in the construction of cold storages or ice houses. Small buildings were constructed with different materials, and in different ways; exactly the same amount of ice was placed in each, the temperature of each was taken, and the drip from the melting ice carefully weighed. Some of the results given by Mr. Ruddick were that brick was not a good insulator; a 13-inch brick wall was no better than three-ply of lumber; hollow cement gave exactly the same results as brick; weakness in cement blocks, the walls may get out of plumb and cause cracks clear through the wall; solid cement wall preferable to cement blocks; air spaces are not being used in modern buildings; sawdust is a poor material to use in a wall—in fact, it should never be used; mill shavings are the best filling material to use. He emphasized the necessity of using the very best damp-proof paper in constructing the walls and ceilings of buildings. Common building paper should not be used. The greatest care should be taken in having all the lumber used carefully matched to avoid the least little crack.

Prof. Dean, in his address on "Our Canadian butter in the British market," said he would place our butter in the same class as Russian. A number of those present thought this entirely wrong. Manchester, he considered too critical a market for our Canadian butter; Leeds was a good market; Bristol he considered the most favorable market for Canadian butter. He stated that we were developing far too much acid in the cream at the present time to produce the mild flavored butter required for the British market, and that inside of five years our method of making butter would be entirely changed to churning perfectly sweet cream, having the butter made and packed in two hours from the time the milk was delivered at the creamery. He did not say, however, how he was going to do away with the hand separator and the cream-gathering creamery.

Mr. Fred Dean gave an interesting paper on churning and washing butter. This is a live subject among buttermen at the present time, and an interesting discussion took place regarding the moisture contents of butter. Mr. Dean stated that it was quite possible to alter the moisture contents of butter by different methods of churning and washing the butter. One instance he gave was that a creamer who was taking 24 pounds of milk to make one pound of butter, and by changing the method of churning and washing the butter it only took 20 pounds of milk to make one pound of butter.

Mr. Johnston stated that one of the chief defects in Western Ontario butter in the past was that it was too salty. This was not the case dur-