

On the Farm.

SWINE-FEEDING EXPERIMENTS.

Prof. Day, agriculturist of the Guelph Agricultural Experiment Station, has concluded one of probably the most important series of experiments ever attempted and successfully carried out in the interests of swine-raisers. The object of this experiment was to wage a battle of the breeds. Six breeds of pure-bred hogs entered the lists, comprising Berkshire, Poland-China, Yorkshire, Chester-White, Tamworth, and Duroc-Jersey.

The contest was on the principle that the proof of the pudding was to be in the eating thereof, consequently the William Davies Company of Toronto constituted the commission to distribute the trophies to the victor. The Tamworth was the victor. The Davies Company speak thus of the breed: "General characteristics, exceedingly fleshy, small shoulder, evenness of fat on back; a long head, which, however, is compensated for by neck being moderate, bone suitable. . . . The two breeds of hogs which are unquestionably in advance of all the others, from the standpoint of a Canadian exporter who wants a long, lean side, with well-developed belly and small shoulders, and full ham, are Yorkshire and Tamworth. Coming next to these two breeds are the Berkshires, all of the others being generally so unsatisfactory that they do not need to be considered."

The Yorkshire, while satisfactory to the packer was, however, so far behind in economy of feed, that this relegated them to second place. The Tamworth was the most economical feeder—on a par with the Berkshire in this regard and far above all others as a subject for fine bacon; the Yorkshire keeping close company, however, in this regard.

SPRAYING THE CURRANT.

The varieties of the red and white currant, *Ribes rubrum*, usually shed their leaves very early—often before the end of summer. This early dropping of the leaves has not been recognized by all as the result of disease, and currant bushes often fruit well in spite of it. Some years ago the experiment was made at our station of spraying currant bushes with the Bordeaux mixture and ammoniacal copper carbonate solution in early spring and the applications were repeated at intervals until June 1. The result showed that the sprayed bushes retained their foliage considerably longer than those not sprayed, but the fruit was so badly soiled that the treatment was not considered practicable, and so it was abandoned.

The last season the experiment was made of a single spraying with Bordeaux mixture after the harvesting of the fruit; and the result was striking. The early dropping of the leaves of the red and white currant is due to the attack of a fungus, *Septoria ribes* and our experiment the last season seems to show that this disease may be very largely prevented by spraying the bushes after the fruit is harvested. The premature dropping of the leaves reduces the vigor of the plant, and doubtless tends to the production of inferior fruit.

IMPROVING OLD STABLES.

There are thousands of old and poorly constructed stables, sheds and the like all over the northern states, in which cattle are kept during the winter. These are often so cold that the ground freezes solid. Such shelter is very inadequate and results from a lack of building material in many of the prairie states and also neglect of farmers to provide comfortable stables even when the material is at hand. On all farms where grain is raised these stock barns can be made comfortable with the straw. If it can be baled so much the better. Place a layer of bales on the inside of the barn wall just as you would lay brick, omitting of course the mortar. When the top is reached place a board or rail on the top bales to keep them in place.

If it is impracticable to have the straw baled it can still be used with good results. Build a fence as high as the wall of the building five or six feet outside of it and have it made comparatively tight by placing the poles or boards used not more than one foot apart. Fill in the open space between the fence and the building with straw and tramp it down as solidly as possible. If flax straw can be used this makes the best kind of filling. It is impossible for the wind to blow through this, and the stable will be as warm as need be.

BACTERIA IN SOILS.

The new theory of inoculating the soil with cultures of bacteria for special crops is a German discovery, and so far as tests have been made success has attended the experiments. With the opening of the new year of 1899 there will be opportunities for farmers to experiment without depending on the several stations, and as the cost is small every farmer should become interested in making discoveries with the use of the "commercial bacteria." Already the dairymen of this country have accepted these minute agents as adjuncts to success in the production of choice butter, and scientists have

discovered that bacteria perform special functions in the growth of all plants.

One of the easiest modes of experiment with bacteria is for farmers to procure soil from other farms. On a field where one farmer endeavored for years to grow clover, without success was applied four bushels of top soil from a field which had grown a luxuriant crop of clover. The result was almost miraculous, as the field which had been used without success produced a magnificent crop. It had all the elements of fertility for clover, and was capable of giving a large yield, but was lacking in the micro-organisms necessary for converting the plant food of the soil into forms best adapted to the desired crop.

A MERITORIOUS BREED.

The Houdan is the great market fowl of France, and since it was introduced into this country, it has been greatly improved. The Houdan has good size and produces a great amount of very tender flesh, while in addition it lays a large number of large, white eggs. It is a crested variety, and these birds present a very striking appearance, the pullets especially being exceedingly handsome.

The plumage is black mottled with white, and the shape of the birds shows that they carry a good quantity of meat upon their bones. They have a white skin, which is against their sale in some markets, but as the average farmer sells his poultry this will hardly count for much against the breed, certainly not when customers have once tasted the splendid flesh that the Houdans carry. They grow rapidly, are very tame, and are, moreover, good foragers. They are certainly worthy of more general culture than is at present given them.

MUST BE A GOOD DAIRYMAN.

No matter what breed of cows is used nor how perfect the dairy appliances, no dairy will be a success without the right kind of a dairyman. More depends upon securing the right breed of dairyman than anything else. He must be intelligent, studious and willing to work. When such a man goes into the dairy business the first step should be to secure the right sort of a dairymaid as a helper. He must then get as good cows as he can afford to buy, using them simply as a basis from which to start, testing the individual merits of each animal and breeding only the best, so that by the law of selection he will be continuously weeding out the less profitable animals and raising the standard of his herd.

TO BLOT OUT ENGLAND.

How Russia Should Prepare for the Supreme Battle.

A Reuter despatch from St. Petersburg, says: The Grashdanin publishes an article in which it asks whether Russia would not be acting wisely in renouncing the possession of Port Arthur and Talienvan.

This renunciation would have the following effects: Firstly, to give her a free hand; secondly, to rid her of harbours, where in the event of a war with Great Britain, her ships would be caught like rats in a trap; and, thirdly, to spare her the cost of enormous defences.

By occupying herself chiefly with affairs in Northern China, especially that part of China which borders on Russia's own possessions, and with the railway in Manchuria, Russia will be a "warning signal to the British, even in the south of China."

"Russia could then proceed," says the journal, "to develop her territory in the direction of Afghanistan, and prepare herself for the supreme combat which she must inevitably have, sooner or later, with Great Britain, profiting at the same time by the latter having scattered her forces in all directions—an error by which she will have weakened herself in India."

"It is absolutely essential that Russia should fight this supreme battle on land and not on sea, encountering her adversary simultaneously in the north of China and at the gates of India."

The Grashdanin rejects all notion of an eventual rapprochement with Great Britain, the inveterate enemy of Russia, from whom the latter can look for no advantage, and its advocates, on the contrary, an alliance with Germany, in which France might be induced to join.

GREEN CITY FOLKS.

Mrs. Hayseed—Yes, I had some city boarders durin' th' summer, but I didn't interdoce 'em around much 'cause I saw they wasn't fust-class folks what goes out of the city every summer.

Neighbor—Oh! They showed they'd never been in the country before, did they?

Mrs. Hayseed—Yes, indeed. Why, the very fust meal they asked for cream.

Abbot Hilda died.

BABYLON'S RUINS.

The ruins of Babylon have for years been the searching grounds of antiquarians and others. It is said that visitors to these wonderful ruins have recovered over 400 diamonds. Many of them are uncut, and the majority are polished on one or two sides only.

RELIEVED.

He—I love you.
She—Oh, is that it? I was afraid you had the jaundice.

THE NEWS IN A NUTSHELL.

THE VERY LATEST FROM ALL THE WORLD OVER.

Interesting Items About Our Own Country, Great Britain, the United States, and All Parts of the Globe, Condensed and Assorted for Easy Reading.

CANADA.

The Quebec Ice bridge has formed. Hull, Que., will now control a civic lighting plant.

It is reported from Winnipeg that the Galician murderer, Simeon Czuby, is dying of grief.

Edward Hardy, out of work, discouraged, attempted suicide with a razor in Hamilton. He will live.

F. X. Choquette, Q. C., Montreal, has been appointed police magistrate of Montreal, succeeding Judge Dugas.

The report that ex-Mayor A. D. Stewart of Hamilton died on his way to the Klondike seems to be authentic.

Lord Strathcona has ordered a new organ for St. Paul's Presbyterian church, Montreal, as a Christmas gift.

The returns from the recent shipment of fattened poultry to England show that it was highly profitable and successful.

Four Hamilton shoe dealers were fined 25 cents each for breaking the 7 o'clock closing-by-law on the evening of December 23.

Three Italian brothers named Cubelli have been sentenced at Montreal to three years in the penitentiary for counterfeiting.

Prof. E. Stone Wiggins announces that he has gone out of business as a weather prophet owing to the lack of popular appreciation.

A delegation of the civil servants waited on the Premier and Hon. Mr. Fielding at Ottawa to urge the restoration of the statutory increases in their pay.

The Department of Trade and Commerce have received notice that lead bullion and dross may be imported into the United States and refined in bond, subject to a duty of 2-1/8 cents per pound gross weight.

During the past navigation season 21,234,664 tons of freight were locked through the Canadian and American canals at Sault Ste. Marie, an increase over last year of over 2,000,000 tons, and the highest on record.

Solicitors for the Bank of Ottawa have issued a writ against the Ontario Central Railway Company, claiming \$306,759.78, the amount due as interest upon certain coupons to debenture bonds issued by the company.

The Mounted Police are sending a patrol to Red Deer country. Settlers report that the Blackfoot are killing cattle. The Indians are short of meat, as the antelope have not come south, owing to the mild winter.

Arrangements have been made by the immigration branch of the Interior Department to send Mrs. Sandford of Portage la Prairie to Great Britain to conduct a movement for the emigration of servant girls to western Canada.

GREAT BRITAIN.

Sheffield, Eng. has made a profit of \$41,000 during the past half year in running its own street cars.

The Bishop of Bath and Wells was flooded out of his palace at Bath recently by an overflow of water from the old moat.

A case of bubonic plague is reported to have been discovered on board the steamer *Goleonda* at Plymouth, from Calcutta.

Johann Schneider is to be hanged in London, Eng., for the murder of Conrad Berndt, whom he killed with an axe and burned in an oven.

England's oldest royal postboy, Jonas Miles, is dead at the age of 93 years. He served as postilion for George III., George IV., William IV. and Victoria.

Emperor William has sent a gold watch to the London policeman who saved Count Valley from an assassin outside the German Embassy in London.

Ricciotti Garibaldi, who speaks English well, was the guest of honor at a recent dinner of the National Liberal Club, and started the club by a toast he proposed. "And now, gentlemen," he said, "I drink to the health of Mrs. Grundy, that is to say, the great public opinion of England."

Ireland's telegraph department recently proved that it could manage Gaelic by taking the speeches delivered at an Irish festival at Letterkenny, County Donegal, in the native tongue and receiving them at Dublin, so that they could be printed in Gaelic characters in the Freeman's Journal.

The naval authorities have been officially notified of the intention of France to replace her obsolete war vessels engaged in the fishery protective service on the Newfoundland coast with modern cruisers. Great Britain will also put out of commission the obsolete gunboats *Pelican*, *Buzzard* and *Cordelia* and substitute for these vessels of sufficient power to cope with the Frenchmen.

UNITED STATES.

It is reported that the big wire trust has purchased the Cleveland Rolling Mill Trust.

Mrs. J. Weller was burned to death by the explosion of turpentine at Omaha, Nebraska.

Burglars entered a New Jersey jail and robbed the sleeping Sheriff, George Litterest, of \$500.

Admiral Dewey is now the senior officer of the American navy, owing to the retirement of Admiral Bunce.

Police raided three poolrooms in

Louisville, Ky., arrested operators and bettors, and carried away \$18,000.

Senator Justin S. Morrill, author of the Morrill Tariff Act, of 1861, is dead at Washington. He had been in Congress 44 years.

A report from Wichita, Kan., says an old soldier, thought to have died, remained buried two days, and when resurrected was living.

Joseph Churchill, aged 80, and his wife, aged 72, are in the Divorce Court at Janesville, Wis. They were married in Peterboro, Ont.

Edward J. Ivory, the Irish agitator, arrested in England a year ago on a charge of conspiracy, has filed a petition in bankruptcy in New York.

A mysterious robbery occurred at the American National Bank, Sunday night, at Lima, Ohio. Gold and paper money to the amount of nearly \$50,000 was carried off.

A satchel was stolen from Mrs. Wm. L. Smith, of East Liverpool, Ohio, containing money and diamonds to the value of \$1,500 while en route to New York in a Pullman car.

Another suspected murderer of Amos J. Suel has been arrested at Chicago and discharged. He is the 41st thought to be Will Tascott, the murderer, who has eluded detectives now for ten years.

The New York Auto Truck Company with a capital of \$1,000,000, has been incorporated. With this capital it is proposed to place auto-trucks, operated by compressed air, in the streets of that city.

Police of Columbus, Ohio, believe they have James C. Dunham, for whom there is a reward of \$11,000 offered, dead or alive, at San Jose, Cal. He is charged with the murder of his wife, her parents and brother.

Marion Taylor was lynched at Scottsburg, Ind., on Saturday morning by a mob. He was taken from the jail, where he had been since November 3rd, on the charge of having attempted to kill his wife.

Prof. Henry T. Rosoland, of Johns Hopkins University, has invented a printing telegraph instrument, which enables several messages to be sent and received at the same time from the same or separate points over the same wire.

Michael Ferrando, charged in New York with having decoyed a Greek sailor, Nicholas Zoutzouble, to his room and there beating and robbing him, has been identified as the Greek brigand Soteris de Sarantos, for whom the Greek Government has offered 5,000 francs, dead or alive.

GENERAL.

Civil war seems inevitable in Bolivia. Lawlessness is increasing in Havana.

Dusseldorf, Germany, is making ready to hold a World's Exposition in 1902.

Leprosy is reported to be spreading in the provinces of Livonia and Courland, Russia.

The Austrian authorities are alarmed over the increase of arsenic eating in the Austrian army.

The city of Besancon, France, has decided to erect a monument to the memory of Victor Hugo.

The quarrel between the Hungarian Premier and M. Horanszky is likely to lead to six duels.

The Swedish Government expedition sent out in search of Andree, the Arctic explorer, has returned to Stockholm.

Part of the Red Rock mountain in Switzerland has fallen into the village of Airolo, destroying a hotel and several houses.

Belgrade's Svski Dojek has suspended publication for a time, as the sixteenth editor it has had in two years has joined his fifteen predecessors in goal.

Emperor William proposes to spend \$12,000,000, in embellishing the Imperial capital. Part of the neighbouring river is to be made a magnificent avenue.

Galileo's manuscript of the treatise "On the Ebb and Flood of the Sea," written in 1616, has been discovered in the Vatican library by Father Luzzi, the sub-librarian.

Grand Duke Cyril, of Russia, was among the passengers of the steamer *China*, which reached San Francisco from the Orient on Monday night. The Grand Duke is on his way to St. Petersburg.

The oldest prelate in the Catholic Church is Cardinal Mertel, who is now in his ninety-fifth year, and so active and energetic that he bids fair to see the twentieth century ushered in.

The Petit Bleu, of Brussels, points out that the Belgian cities and villages excel those of any other country in the number of taverns. In Chisleghien, there is a tavern for every thirteen inhabitants.

A French watchmaker has made a microscopic repeating watch that weighs a little over sixty grains. He intends to exhibit it at the Paris World's Fair, after which it will be for sale for \$1000.

An exceedingly clever Japanese workman of Tokio has carved a figure in wood that is so like himself that when the two are placed side by side it is impossible to tell even at a short distance which is the living figure.

A Russian officer has been making experiments with very successful results in the use of falcons instead of pigeons as carriers. He finds they can fly much faster. A pigeon covers ten or twelve leagues in an hour, while a falcon can do fifteen.

Rome has gone poker mad. A number of scions of nobility have recently hazarded their fortunes on the game, which is being played in nearly all the large cafes of the city and has invaded the private residences. The police are determined to stop the nuisance.

A subject of much comment is the extreme mildness of the weather at Moscow and Kazan, Russia, where intense cold usually prevails at this season. The temperature has been so genial for some time that the trees and

bushes in the parks are coming out in bud.

There is trouble in the Dutch navy. Despite a law recently enacted which prohibits commanders of vessels from compelling their subordinates to be present at divine worship on board ship, some of the commanders insist on all men attending the Sunday services.

Russia has been pleasantly surprised by a ukas of the Czar ordering the Academy of Sciences to make preparations for a fitting celebration of the hundredth anniversary of the poet Pusckin's birth. The University of Moscow is arranging for a Pusckin exhibition next year.

A Russian farmer sought to smuggle his son across the frontiers near Pinkallen in order to help him evade military service by hiding him in a load of hay. The young man was so badly injured by the hay fork of the customs officer, during the inspection of the wagon, that he died in a few hours.

Three municipalities—Chamounix, Les Houches and St. Gervais—are fighting in the Swiss courts for the ownership of the top of Mont Blanc, and the right to let concessions to speculators for the entertainment of tourists. The old maps only mark divisions on the lower part of the mountain.

A band of robbers nine men strong, recently attacked and robbed thirty peasants on the border of Kutais Province, in the Caucasus. They were followed by a detachment of Cossacks and mounted men as far as Adjria, where the brigands opened fire on their pursuers and retired into the forest.

A perilous feat was recently performed by a Cossack in a menagerie at Moscow. He was directed to clean the cages of tame beasts and sponge the animals. By mistake he entered the cage of a savage tiger with a bucket of water, and coolly proceeded to wash the brute. The tiger liked the novel sensation and quietly submitted.

NAMES TO BURN.

People Who Have to be Announced in Sections.

Oriental potentates have been popularly supposed to head the lost of rulers, who are burdened with numerous and extravagant titles, but lovers of artistic justice will be pleased with the fact that Kaiser Wilhelm, the Great Young Man, holds the precedence in this respect. He has no fewer than 55 distinct territorial titles, apart from the orders conferred upon him, numbering upward of 40, and his ranks in various armies and navies. Nicholas II. of Russia, has a fair number of titles, for on ascending the throne he was proclaimed as "Autocrat of All the Russias, of Moscow, of Kieff, of Vladimir, of Novgorod; Czar of Kasan, of Astrakhan, of Poland, of Siberia, of Kherson-Taurida, of Gronsia; Gosouard of Pskoff; Grand Duke of Smolensk, of Lithuania, of Volhynia, of Podolia, and of Finland; Prince of Esthonia, of Livonia, of Courland, of Semigalia, of the Samoyedes, of Bieloostock, of Correlia, of Foer, of Ingor, of Perm, of Viatka, of Bulgaria and of other countries; Lord and Grand Duke of Novgorod in the Low Country, of Tchernigoff, of Riazan, of Polotsk, of Rostof, of Jarosloff, of Bieloersk, of Oudork, of Obdorsk, of Kondisk, of Vitelsk, of Mstilaff and of all the Northland; Master Absolute of Iversk, of Kastalinsk, of Kabardinsk and of the territory of Armenia; Sovereign of Mountain Princes of Circassia and of other hereditary Princes and rulers; Heir-Presumptive of Norway, and Duke of Schleswig-Holstein, of Stormarne, of the Dithmarshes and of Oldenburg." For the oddest titles of royalties, however, it is necessary to go to the East. The King of Achem is "Sovereign of the Universe and Luminous as the Sun, with Eyes as the Northern Star—a King as spiritual as a Ball is Round, and odorless as a Sweet Flower to his People." The old Kings of Kandy were styled "Protectors of Religion, whose fame is Infinite, Surpassing the Moon, the Jasmine Buds, and the Stars in Excellence, with Feet Fragrant to other Kings as Flowers to Bees."

BOUND TO BE IN THE RIGHT.

It's sorry Oi am to see yez goin' so soon, remarked Mrs. McShantee, as Aer guest, Mrs. McSquatter, arose to leave; but as ye go through Mrs. Mickey Moylan's yarrud, wud ye do me a favor?

Wid pleasure Oi wull, responded Mrs. McSquatter, Sure, I thort, bein' such near neighbors, you an' th' Moylans wud be unfriendly.

They're not at home th' day explained Mrs. McShantee, an' it isn't th' Moylans Oi want to see, she added, with suppressed emotion. This mornin' Mrs. Moylan gave me ballyhoo wid her voil tongue, because moy chickens scratched up her yarrud.

Phwy didn't ye sciolence her? Sure wasn't she in the right? Moy chickens had no call in her yarrud, an' phwat cud Oi do but stand an' take phwat she said. It's meek enough Oi am, Mrs. McSquatter, when Oim in th' wrong. Y'll never find me makin' th' trouble widout Oi have th' right on moy side. See?

Phwat is it ye want me to do as I pass through Mrs. Moylan's yarrud? asked Mrs. McSquatter, with a puzzled air.

Oi want yez ter open th' kitchen door an' let their billy goat out. They locked him in phwin they wint down town.

Sure Oi will that. Thankoe, Mrs. McSquatter, it's a good friend yez are. It won't be long before that billy goat gets over into this yarrud, and thin whin Mrs. Moylan comes home—Hiven hilp'er.