

On the Farm.

TO GET WINTER EGGS.

To make hens lay when the weather is below zero, we must see that they have warm, comfortable, roosting places free from drafts, writes Mr. C. H. Bennett. To keep free from vermin keep their dust boxes well supplied with fine road dust, mixed with a handful of pulverized tobacco, a little sulphur and a few ashes. It is well in the fall to provide a barrel of this dust so that it may be changed. Clean the henhouse often. Close up doors and windows occasionally and smoke well with sulphur and tobacco stems. A lousy hen will not lay well, neither will an overfat one. To prevent them becoming overfat attention must be directed to proper feeding, and exercise. Compel them to scratch for their grain by throwing it among a litter of straw, hay or leaves. If this is attended to regularly, with proper variety of food you will soon have a merry, singing industrious lot of birds, which will repay you many times over for the extra trouble. A mopey, lazy hen fed entirely on corn will not pay for her keep, as she will soon become overfat and unhealthy.

In order to have a well filled egg basket it is absolutely necessary to give a variety of food. I give for their morning meal a mash of wheat bran, corn meal, ground buckwheat or oats mixed with some sort of cooked vegetables such as potatoes, turnips, beets, etc. For dinner I scatter among the litter in their scratching shed some whole wheat buckwheat or millet left in the head. For supper I feed parched corn, as this is the best food that can be given to keep up the warmth of their bodies during the long, cold winter nights, although I give a feed of other grain sometimes at night for a change. Feed meat once a week, and keep within their reach plenty of grit and charcoal, and give some ground bone; chopped onions twice a week help to keep them healthy. I always keep plenty of milk and clean water for them to drink. An occasional dust of red pepper in their morning mash will warm them up and stimulate egg production. I have found venetian red excellent for laying hens; it will prevent cholera and other diseases besides increasing the number of eggs. If the above mode of treatment be commenced in the fall before the weather becomes severe, the hens will be in a good condition to withstand the cold weather and will repay their owner many times by laying a wonderful number of eggs right at the time when eggs are bringing the highest prices.

ORCHARD MANURING.

So much mischief can be done by applying manures of the wrong kind in orchards that we doubt if we do not lose more by manuring than by neglecting to manure. Fruit trees do not require at any time barnyard manures, or their equivalent. What they require is a supply of inorganic food. You can do no better for apple trees than to supply them with coal ashes in which there is a liberal admixture of wood ashes. The coal ashes loosen the soil; the wood ashes furnish the fertilizer. If you can get a supply of old mortar you have just the thing you need. A mixture of lime and salt, when so mixed as to leave no free salt, is excellent for all fruit trees. All such manures should be applied as a top-dressing. A peach or plum orchard needs nothing better than swamp muck or earth from the woods, with a slight addition of phosphate and potash.

If barnyard manure is applied at any time, it should be thoroughly decomposed and applied as a top-dressing. Such manure, if placed about the roots, when planting a pear or apple tree will kill it. Grapes of course want phosphates and potash. They will also respond to a free application of liquid manures during their periods of rest, both in winter and in midsummer. All the tall growing berries, of the bramble sort, will use a large amount of organic matter. But be careful about dressing your raspberries with rank decomposed barnyard manure. The probability is at any time you will develop a fungoid disease that you cannot easily master. If you use barnyard manure in raspberries it should be thoroughly comminuted with the soil as a compost. In fact, we prefer to compost every manure before it is placed on my gardens. Equally important as the manure is the mulching of our fruit trees as bushes of all sorts.

SITTING HENS.

When hens show a desire to sit divide the runs into two with wire netting, keeping half of the fowls in one division and half in the other. As soon as a hen in one yard shows any signs of broodiness, she should be placed in the other, when she will invariably spend two or three days running backward and forward trying to get back through the wire; at the end of that time she has forgotten that she wants to sit, can be returned, and will probably commence laying again in about three weeks. The plan is obviously far superior to that usually followed of cooping a hen when broody, as the incessant exercise must have a strong effect in lessening the tendency to sit.

VILLAGE POULTRY.

One may sum the whole thing up by saying that a growing chicken needs room enough to take sufficient exercise a balanced ration of grain food, green food as much as he will eat, meat food in the form of insects, or the prepared food made to take the place of insects, and plenty of good pure water. Fulfill the chicks will have every advantage the farm raised chick has, and if the breeder is thoroughly interested in his work they will receive some extra advantages that few farm raised chicks get.

TREATMENT OF COWS.

We have found that civil treatment of cows in the dairy barn is sure to create civility among our dairy cattle, and inspires a confidence that insures success. We feel that every item of interest that dairymen manifest in the winter care of their cattle is so much bonafide capital invested that pays a good dividend annually and are sure that many are competent to verify the facts.

SHEEP AS BRUSH DESTROYERS.

The cheapest way to clear a piece of land covered with small brush is to pasture sheep upon it. If the brush is cut with a scythe before turning in the sheep the tender sprouts will be kept down about as fast as they appear. The roots will dry off and decay in one or two years. Cleared in this way, a field will not again grow up to brush if allowed to remain idle a few years. Not the least benefit to the land is the fertility added in the droppings of the sheep and the unusual freedom from weeds for several years.

SIMPLE FATHER OF AN EMPRESS.

The death of the Empress Elizabeth of Austria has brought out many stories of her and her family. Some of the most interesting are about her father, the Duke Maximilian. This man was a remarkably genial and simple character. Once he was making a pedestrian tour and stopped in a small tavern to eat. He had a zither with him, and some guests asked him to play, thinking, on account of his plain clothing, that he was a strolling musician. He obeyed readily and played everything that he could think of till coins rained into his hat. Then he ordered a meal that was so expensive for a strolling musician that the tavern-keeper became suspicious that his strange guest intended to run away after eating without paying. There was hesitation about serving the food, and while the duke was waiting a corporal of one of his regiments entered the inn. He saluted, much to the duke's embarrassment, who threw the money for the meal on the table, and ran away, says the New York Press.

Once the duke was in a train traveling to Vienna to visit the imperial family. In the coupe with him was a banker, who, misled by his fellow traveler's simplicity, patronized him, and in the course of a conversation told him that he had a daughter in Vienna who had married very well. She was, he boasted, the wife of one of the richest bankers in the city. "So?" said the duke. "Why that is quite a coincidence. I have a daughter in Vienna who has married very well, too." "Who is the husband of your daughter, my good man?" asked the banker, and in his most harmless tone, Maximilian answered, "the Emperor of Austria."

REMARKABLE BRIDGE.

A recent British Consular report from the far East describes a suspension bridge of 300 feet span, made of bamboo. The cane is split up into fibers and twisted together to form the cables. Considering its span the material of the structure is quite remarkable.

According to the St. Petersburg Novosti, two new steamships of the Russian Volunteer Fleet will be ordered in England. The Russian naval administration will complete the construction during the present year or 2 first-class ironclads, 4 cruisers and 2 torpedo boats. Next year 3 first-class ironclads will be begun.

To add to the horrors of civil warfare, it is now reported from Bolivia that the Indians have risen and are plundering and murdering everywhere. They attacked a Chilean mining establishment at Corocoro, and the manager, to avoid falling into the marauders' hands, killed his wife and suicided.

A hundred in Paris had her hair caught in machinery before, and her entire scalp, from the nape of her neck to her eyebrows was torn off. She was conveyed to the Broussais Hospital, and after some hours' delay, Dr. Malherbe sent for the scalp. When the hair had been shaved from it, the physician adjusted the scalp upon the woman's head, to which it has since naturally attached itself.

Among the queer things left in London cabs and stages the past year were an artificial leg, a wooden bed-rest, birds in cages, dogs, a gas stove, a portable street harmonium and a sewing machine. Of the three thousand odd purses left in vehicles and taken to New Scotland Yard, it is reasonable to suppose that the majority escaped from pockets in the backs of ladies' gowns. Between seventeen and eighteen thousand umbrellas were left in the public carriages, and one hundred and eighty-one watches.

The fare on two of the street car lines of Cleveland has been reduced to four cents. The company sells seven tickets for twenty-five cents.

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.

A rumor says Parliament will be called for March 16.

The Quebec budget shows a great reduction in the deficit.

The G.T.R. is building 500 box cars at its works at Point St. Charles.

It is reported that platinum is being found in large quantities in the Klondike.

The Grand Trunk is building six ten-wheel passenger engines and six mugs for freight service.

Ald. Laurin has resigned from the Council Board of Hull to become a policeman at \$500 per year.

The National Council of Women at Ottawa will petition the city council to establish a public library.

Drs. D. C. MacLaren and A. Quackenbush, two Ottawa homeopaths, have issued a circular setting forth their objections to vaccination.

The Donnelly Salvage & Wrecking Company has purchased the steamer Eurydice and will use her in connection with their wrecking operations.

Burglars entered the residence of Mr. Alphonse Lapiere, Montreal, chloroformed the inmates of the house and robbed them of their valuables.

There were 1,232 deaths; 498 marriages, and 1,349 births in Ottawa, in 1898. During January, 1899, there were 95 deaths from all causes as compared with 84 for the same month last year.

Dr. D. V. Innes, Canadian immigration agent in the United States, estimates that fully 5,000 persons will remove from that country to make their homes in the Canadian Northwest this year.

The magnificent residence of the late Sir John Abbott at Montreal, has been purchased by a syndicate of wealthy gentlemen, and will be used as a political club. The price paid was \$40,000.

Dr. Leduc and J. A. Bousquet, civic officials at Montreal, have been suspended, charged with attempting to bribe an alderman with \$600, to secure Dr. Leduc's appointment as milk inspector.

The lighthouse on Snake Island, Kingston, is being removed to a point on the shoals southwest of the island. The work is under the supervision of Mr. W. H. Noble, of the Marine Department, Ottawa.

The Master in Ordinary has decided that the American receivers of the Massachusetts Life Association are not entitled to rank as creditors on the deposit of \$112,000 made by the association with the Canadian Government.

The Brockville Peat Company has been granted exemption from taxation by the Elizabethtown Council on the lands, buildings and machinery necessary for the carrying on of peat manufacturing on a large scale in that township.

Dr. E. Pelletier, secretary of the Quebec Board, has issued a bulletin to the Board of Health regarding the present status of smallpox in that province. There have been 11 cases in all since the outbreak, all in Soulanges County.

GREAT BRITAIN.

Mr. Sexton declines the Irish leadership. It may go to Sir Thomas Henry Esmond.

William Laird, of the famous ship-building firm of Laird Bros., at Birkenhead, England, died on Tuesday.

Lord Mountstephen has sent £1,000 to the Prince of Wales' Hospital fund, and says he intends to contribute a like sum annually.

The wife of Mr. John Putt, farmer, Parley Farm, Chudleigh, England, gave birth last week to 4 children, 3 girls and a boy. Mother and babies are doing well.

Canterbury Town Council has decided to present a petition of the honor and freedom of the city to Mr. H. Heston, M. P., will take place on March 23.

Among the latest contributions to the Prince of Wales' Hospital fund for London are the following: The Fishmongers' Company, £1,000; Lord Grimthorpe, £100.

It is calculated that some 10,000,000 photographs of Queen Victoria and of the Prince and Princess of Wales are produced annually, which find ready sale all over the world.

The appeal for \$11,500,000 in connection with the Chinese Imperial Railway 5 per centage gold loan in London has been a phenomenal success. It was applied for five times over.

The committee of Lloyds have given silver medals to officers of the American line steamer Paris for bravery in rescuing the crew of the British steamship Vindobala in mid-Atlantic.

The trawler Neptune has landed at Grimsby a singular catch, consisting of 56 casks of butter, which were picked up in the North Sea, 25 miles to the north of Hartlepool. The skipper found the sea almost covered with casks of butter.

The cabbies of London, 7,000 in number, are on strike because the Police Commissioners prohibited empty cabs standing on the Strand, Piccadilly and Bond street. The hotels and theaters are hit hard.

Right Hon. Sir Henry Campbell-Bannerman, formerly Chief Secretary for War, has been elected to succeed Sir William Vernon Harcourt as leader of the Liberal party.

The British soldier is the best fed individual of his class in Europe. He

receives for his daily rations 16 oz. of bread, 12 of meat, 2 of rice, 8 of dried vegetables, 16 of potatoes, and once a week he receives 2 oz. of salt, 4 of coffee, and 9 of sugar.

Col. John Morgan, Mayor of Brecon, Wales, has signified his intention of laying down at his own cost plant for the electric lighting of the town. It is estimated that this will practically mean a gift of £5,000. In connection with the Patti wedding, the Mayor will also bear the cost of the street decorations.

The number of women employed in the English post office at the present time is over 20,000, or about one-fifth of the whole of the vast army of workers in that huge department. Of that number 1,820 are employed on clerical work of a high order, and with great success.

Mrs. Spurgeon, wife of the pastor of the Metropolitan tabernacle, London, held a reception Wednesday in aid of the fund for the rebuilding of the edifice, which was destroyed by fire on April 20, 1898. Within an hour she collected £5,000, she herself contributing £250.

The Gas World declares that there are now in use throughout Great Britain no fewer than 500,000 country penny-in-the-slot meters. These consume 7,000,000 cubic feet of gas, or as much as is sold in Birmingham and Leicester combined, to all classes of consumers. In recent years the output of copper coin has greatly increased from this cause.

The Drapers' Co., of London, Eng., have offered to make a contribution of £200 a year for ten years towards the development of facilities for agricultural education at an important seat of learning. The only condition the company make in connection with their offer is that the Board of Agriculture shall give the scheme the benefit of its support.

It is proposed to raise £20,000 to provide a stipend and expenses of a bishop, who shall undertake the oversight of the whole work of the church of England in Egypt and the Sudan. At present this region is included in the jurisdiction assigned to the Anglican Bishop in Jerusalem; and the bishopric contemplated must, until circumstances allow of a division in that jurisdiction, be in the relation of assistance to him.

UNITED STATES.

The cereal food companies of the United States are combining.

The people of the United States consume about 4,000,000 bottles of pickles every week.

The new car manufacturing combine formed in the United States involves a capital of \$60,000,000.

Considerable Australian gold, re-mined at San Francisco, is coming to New York by registered mail.

Miss Lena Gordon, of Cornwall, Conn., is suffering intensely from wisdom teeth which grow sideways.

The Electric Boat Co., New York, has been organized to build boats and run a steamship line. Capital \$10,000,000.

A consolidation of all the tin-plate and steel interests in the United States is registered at Chicago, with \$300,000,000.

Thousands of sheep have perished in Nebraska as a result of the late severe weather. They were mostly sheep that were brought from the South and not yet accustomed to the rigorous climate.

A Buffalo delegation in Washington are spending their days and nights with great diligence, asking members to support a bill granting \$500,000 for the Pan-American Exposition in that city in 1901.

The State Department at Washington has declined to recognize the claim of the Austro-Hungarian Government for indemnity on account of the Hungarian strikers killed by Sheriff Martin's posse at Hazelton, Pa.

The imports at the port of Buffalo for the past year totalled \$5,513,000. Of this \$3,242,795 was from Canada.

The chief items in the Canadian list were cattle, \$851,530; horses, \$30,374; sheep, \$598,145; and lumber, \$359,412.

The disappearance of the Chinese who were admitted to the United States to take part in the Trans-Mississippi Exposition at Omaha is still a mystery, and there is trouble ahead for all the Chinamen in the United States.

A banana trust is talked of in New York, a candy trust in Chicago, in Boston a consolidation of the print works in the United States, and at Providence, R. I., a consolidation of all the large steam engine building companies.

The war investigating commission at Washington has prepared its report. The beef supplied to the Cuban expedition is declared to be good enough for an emergency ration, and the success which attended the American arms seems to have decided the commission in finding generally that the conduct of the war was all right.

GENERAL.

The Sultan of Turkey is ill. He has a variety of delusions and is in constant fear of assassination.

Six cases of yellow fever have developed among the soldiers of the New York Regiment at Guanajay, Cuba.

Two thousand men are engaged in pushing the work of the Simplon tunnel, twelve miles long, through the Swiss mountains.

Post offices have been established at Fashoda, Sobat, Senaar, Duem, Abu Haruz and Waled Madika (f) in the Sudan.

A member of the Japanese Diet has accused the Government of paying him for his vote on the land tax bill, recently passed.

As an indication of the general depression in the Cape, the railway revenue shows a weekly reduction of \$100,000 as compared with last year.

A British soldier and a Kaffir had a

prize fight in Cape Town, at which the native was terrifically beaten, dying from his injuries a few hours later.

Electrical weaving machines are in use in Germany. Seamless stockings, with double heels, are rattled out of each machine at the rate of 11 pairs an hour.

Central China is seething with discontent. Rebel Yu-Man-Tze is reported to be on the road again, and to have captured two French missionaries.

The Norwegian Army has a highly trained corps of skaters armed with repeating rifles. These men can be manoeuvred on ice with a rapidity equal to the best trained cavalry.

The British military authorities in India and elsewhere have at their command 25,000 camels. Thousands of these useful but ugly animals are used in India to carry stores of all kinds when troops change quarters by line of march.

While there are 125,000,000 people whose everyday language is English, there are only 90,000,000 who speak Russian, 75,000,000 who speak German, 55,000,000 who speak French, 45,000,000 who speak Spanish, and 35,000,000 who speak Italian.

THE TRANSVAAL MINES.

198 Gold Mines, but Only 38 Pay Dividends—The Diamond Industry—Coal Mining.

The report on the mining industry of the South African Republic for 1897 presented to the Volksraad gives remarkable details of the progress made in the gold mining in the Transvaal and the striking regularity in the yield of gold, hardly equalled by any other known gold fields. The capital of the 198 gold mines working at the end of 1897 was \$363,863,750. Of these, 28 mines with a capital of about \$50,000,000 paid \$14,750,000 in dividends, or nearly 30 per cent. Sixty-four other mines were producing gold but paying no dividends, and some could not pay any without a considerable reduction in working expenses. The other 106 mines were in course of being opened up.

The total value of the gold yield in 1897 was \$58,250,000, being \$15,000,000 more than in 1896. Of this 66 per cent, was from crushing mills and 34 per cent, by chemical extraction. The quantity of ore worked was 5,741,311 tons, which gives a yield of a little over \$10 to the ton, which as the working expenses were about \$6.62 per ton, left a net profit of \$3.38 per ton. The working expenses in 1896 had been \$6.83, and in 1895, \$7.54 per ton. The total expenditure of the gold mining industry had been \$45,250,000. As during the past year, so in 1897, The Transvaal Government refrained from levying the tax of 2-1/2 per cent. on the yield, and as there is no income tax and no exchange or stamp duty is paid on newly issued shares, the gold mining industry does not appear to have much to complain of in that respect. The reduction of the price of dynamite by \$2 and the lowering of railway rates contributed in increasing the profits.

There were, however, great losses made in Transvaal mining securities during 1897. These are attributed to the

UNSCRUPULOUS PROCEEDINGS

of promoters, who formed nearly 400 companies with a total capital of \$360,000,000 in localities where no gold existed, and overcapitalized other companies to such an extent that dividend paying was entirely out of the question even if dynamite had been imported free of duty and coal carried to the mines free of charge. The profit paying capacity of the mines in general might be increased but for the causes, namely, the theft of gold from the works, the illicit sale of alcohol to the native laborers and the labor question generally, about 25 per cent. of the Kaffir laborers being constantly incapacitated for work. The scarcity of labor tells heavily against the economical working of the mines, and the premium of \$15 to \$20 paid to Kaffir agents to procure labor has only resulted in encouraging desertions of laborers from one mine to pass through the agent's hands to a brief service at another, when the process would be repeated. The Transvaal Government has done what it could, short of reducing the Kaffirs to actual slavery, to remedy these evils, but without much effect. It is estimated that the losses incurred through the causes enumerated amounted to the very considerable sum of \$10,750,000, of which rather more than half was by theft. The total area of gold claims in 1897 was 251,659 acres, a large decrease on the previous year, due to the abandonment of worthless claims.

In coal mining there was considerable progress. There were twenty collieries at work, with an output of 1,600,212 tons, being an increase of 162,915 tons over that of 1896. The price fell, however, from \$2.28 per ton in 1895 and \$2.11 in 1896 to \$1.88 in 1897, leaving but a small margin for dividends, that amounted altogether to only \$27,500. The wages of the white miners range from \$100 to \$150 a month. Besides gold and coal, there is a small production of silver, lead and tin, not of much importance as yet. Diamond digging in 1897 yielded about 4,000 carats, and is likely to receive an impetus from the recent discovery of a field near Pretoria, which, it is hoped, may prove another Kimberley. At the time the report was completed 367 diamonds had been dug up, the largest weighing sixteen carats. The same difficulty, however, that hampers the gold and coal mining industries tells against the economic working of the diamond fields.