

FARM-FIELD AND GARDEN

INCUBATION REQUISITES.

One of the most important things in running an incubator is to begin right. In the first place, get good fresh eggs, for without such material nothing can be done. They may be eight or ten days old if properly handled, but no older if possible. If necessary to purchase the eggs, get them from neighbors who keep enough male birds to insure strong, fertile eggs. If brought from a distance store them for about 12 hours before setting the machine, writes a correspondent.

By all means get a reliable machine. Set it where the temperature varies as little as possible, but in a well ventilated room. Be careful to avoid a drafty place. After it is placed in position use a spirit level to insure an even distribution of the heat. Fill and light the lamp and regulate the machine. Place thermometer as near the centre of the machine as possible, with the middle of the bulb resting against an egg. When it registers 103 degrees and remains at this heat for several hours, the eggs may be put in the machine. The cold eggs will lower the temperature for a short time but will heat up gradually. After they reach 103 degrees keep them at about this temperature.

When they are hatching, we generally run the machine at 104 degrees, as we have found by experimenting that we get more chicks in this way. We don't let the machine run below 103 degrees if we can possibly avoid it. Although some chickens will hatch at 102 degrees they are not usually as strong as if the heat had been higher, while some will fail to get out of the shells. We formerly turned the eggs twice a day, but now we turn them only at noon, and they seem to hatch better.

We test out all the infertile eggs the seventh day and boil them after the chicks hatch. The yolk is fed to the little ones for their first meal or two as long as they last. About the 14th day we test again and take out any eggs that have dead chickens in them. To test, we hold them before a well lighted window, on a clear day, with the aid of a leather tester. After they have been tested, there will probably be space enough to allow them to lie flat in the tray. We fill the lamp every morning, clean the wick by simply pinching the char off and make it slightly rounded down at the corners. The sleeve of the burner is always kept clean, so it will work smoothly. We fill the moisture pans full of warm water on the 18th day and after the chicks once commence to pip, we do not open the machine until they are hatched.

We have a nursery beneath our incubator. Into this the chickens drop soon after hatching. If we were running an incubator not provided with a nursery, we would not open the machine unless so many chickens have hatched as to interfere with the thermometer. Then of course they would have to be taken out and put in the brooder. The more speedily the removing is done the better, as the escape of heat and moisture is very rapid and the chicks still unhatched may suffer.

DEVELOPING SHEEP.

To develop a good flock of breeding sheep for wool and mutton I would begin with ewes that are half Merino and mate them with a buck that is a full blooded Shropshire, writes Mr. Frank G. Hughes. In this cross you get a grade of sheep that is hard to beat for both wool and mutton. By this method I once got a twin lamb that sheared, when a little more than a year old, 16 lbs. of good wool and when a year and a half the carcass weighed 160 pounds. I cross my sheep back and forth as my judgement tells me is best. If the sheep are getting too wrinkly and the wool too short I get either a Cotswold, Oxford or Shropshire buck, and if the fleece is getting too hairy and light in weight I breed back to the Merinos.

In caring for the flock I prefer green pastures for them as many months in the year as possible. Bluegrass makes the best permanent pasture. Dwarf Essex rape can be sown as soon as the ground will work in the spring and if sown alone five or six pounds of seed will be required per acre. Six or eight weeks after sowing it will be ready for pasture which will last until freezing weather. A smaller amount of rape can be sown with oats and after the oats crop is removed I have an excellent fall pasture. Sheep like rape, but I would not advise anyone to keep them on rape alone. They should have plenty of pure water at all times of the year.

Pumpkins are good feed for them in the fall of the year. When winter comes on and the pastures do not furnish enough feed to keep them thrifty and growing nicely, I begin feeding corn and fodder, cowpeas, and clover hay and sometime threshed oats or sheep oats. I believe ten sheep will eat as much as one cow and I aim to feed accordingly, I prefer to feed on the ground unless it is muddy and wet when I feed in racks; the threshed oats of course I feed in a trough.

I prefer to have the lambs come in February and although it may require care to save them in cold weather, when fall comes I think I am ahead for they go through the win-

ter better and make better sheep than do late lambs.

FATTENING HOGS.

To fatten swine quickly and with the least feed, one must go to considerable expense at the beginning. This will come back soon if managed properly. I believe a hog is something like a human being writes Mr. O. J. Brown. He likes a change of diet. It has been my experience that in cooking feed once in a while the best of results were secured. I feed largely of wheat middlings. An eight or ten-horse power steam engine comes very handy in grinding feed.

Turn the ground feed into a tank or barrels and turn the steam into tank or barrels. In five minutes the feed is cooked ready to feed when cool enough. If in cold weather, feed warm. The animals relish it better and it keeps up the animal heat. Keep salt, ashes and charcoal handy and give a little two or three times a week. In watering swine I think spring water best, for the hogs like pure running water. If the spring is convenient, put in a hydraulic ram and pipe to where you want it.

Swill and milk, mixed with wheat middlings and some corn make a good ration. Keep in loose condition. Do not put more than three in one lot, for they are apt to injure one another. When farrowing time approaches separate them and put each sow in a lot by herself. Provide a good-sized lot with a shed inclosed and give plenty of good, bright straw. An 8x8 shed will do with a lot large enough for exercise. When the pigs come they will thrive on sunshine and the teat until they get large enough to eat with the sow. They will soon learn to eat. When warm enough provide a place for the sow to wallow. Treat her with kindness and she will bring forth abundance. When the pigs are four or six weeks old, turn them into a grass lot, either clover, oats, or rye. Keep the rings out of her nose, for if she roots much, there is a lack of some food element which you must provide.

SOME INGENIOUS DODGES

BELEAGUERED TROOPS ADOPT STRANGE RUSES.

Baden-Powell's Clever Trick—Loading Guns With Matches.

Nothing so greatly taxes the resourcefulness of commanders and troops alike as a siege or blockade, and many and strange have been the expedients to which they have been driven.

Probably no leader ever did more towards bluffing his enemies, and at the same time keeping up the spirits of his own men, than Baden-Powell at Mafeking. Most of his tricks are historic, but here is one which was not much heard of at the time.

The siege had been in progress about five months, when one day Baden-Powell ordered a parade of the garrison, and called on every man who could do tailoring work to step out. A number did so, and were ordered to fall to and make riding breeches out of a quantity of white linen lying at the stores.

COAT DOESN'T MAKE THE MAN.

Seventy pairs were turned out, and the same number of tunic fronts as lancers wear. Helmets were obtained from the Native Police Stores, and a few mornings later the Boers were nearly paralysed by seeing through their glasses a squadron of lancers parading in the defences. They actually believed that reinforcements had got into the town, and as they dreaded lancers worse than any other arm of our troops the garrison had a comparatively easy time of it for some days as a result of this clever ruse.

The Boers themselves, however, were not behind us in 'cuteness. At Ladysmith, for instance, they obtained some old gas pipes, and so arranged them that they could fire in them charges of black powder.

Every time one of their big guns, loaded with smokeless powder, was fired a gas-pipe was let off a few hundred yards away. Naturally, the British gunners directed their fire at the tell-tale puffs of smoke, and it was some time before the cunning ruse was discovered.

MATCHES AS AMMUNITION.

The Americans had notorious trouble in subduing the resistance of the Philippine islanders when they took over those islands from Spain, and of all their enemies the most persistent were the inhabitants of one of the Visayan islands known as Panay.

American vessels endeavored to blockade it at last, but this proved a difficult task. Several junks were stopped and quantities of contraband seized, but yet the islanders seemed to be plentifully supplied with ammunition. Eventually a vessel bound for a supposed friendly village was stopped, the cargo being millions of boxes of Japanese matches. Soon afterwards another vessel was overhauled bearing a similar cargo, and then suspicion was roused.

It was suggested that the heads of these matches made a good explosive. Experiments soon showed this to be a fact. By rubbing the compound from the stick a practically smokeless explosive was obtained of considerably higher power than black powder. Indeed, the velocity was o-

great that the bullet frequently stripped, but even so penetrated

FIVE INCHES FURTHER

into sand than did one driven by black powder. After this it may be imagined that no more matches got into Panay.

Just over 300 years ago the Japs were fighting over the very same country where their present campaign is taking place, but on that occasion they had things by no means their own way. Their enemies, the Coreans, had been reinforced by 120,000 Chinese, and the Japs were driven southwards from Ping Yang towards Seoul.

A force of Coreans fell back before the main Japanese army and were penned against the Im-jin river, a stream with high banks. In order to cross and escape from their predicament the Coreans were forced to build a bridge of the most ingenious construction. They had no timber and no ropes, so they cut lengths of the tough creeper called "chik," and made from this material eight great hawsers, each 150 yards long. These they attached firmly to logs sunk in the ground on the near side, and then floated the other ends across the river, and anchored them in the same way.

The hawsers dragged in the water in mid stream, so the Coreans taunted them by twisting them with stout bars of wood. Brushwood was then piled on the hawsers and clay laid on the top till a roadway was formed. Over this an army of several thousand men, with all their camp equipage, crossed in perfect safety, and, having crossed, cut the hawsers through and escaped.

FIGHTING WITH FIREWORKS.

Sir Harry Johnston, of Central African fame, is another bad man to attempt to corner. On one occasion, when exploring the great volcanic range of East Africa, he was suddenly attacked by a great band of the savage Masai, the most warlike tribe in all Africa. They were fully five hundred in number, while his force consisted of a bare hundred of Zanzibaris, who are not good fighting men.

Intrenching himself as well as he could at the foot of a steep hill, he turned to bay, but his little party were terribly hard pressed, and it was all his men could do to withstand the frequent rushes of their savage enemies.

Towards evening things were looking very black, when a brilliant idea came to him.

"I remembered," he says, "that I had among my stores a box of crackers and fireworks. I told my followers to keep on fighting and all would be well. When night fell I climbed up the mountain side, unseen by the Masai, with a Zanzibari to carry the box, and half way up the hill I let off a whole packet of squibs, colored fires, and rockets."

A great blaze of blue and red fire lit up the dark crags and the forest below. The Masai are notoriously superstitious, and when they saw the extraordinary illumination blaze up into black sky they instantly took to their heels. The evil spirit of the mountain was evidently fighting for the white man, and it was no use to stop and argue with him.

TO SEE HER HUSBAND DIE.

Tale of Poverty and Sickness Among London's Poor.

With the dwindling light from a penny-in-the-slot gas meter casting its last flickers on her fast-dying husband, Mrs. Tranter, a starving woman with four young children, living in Clerkenwell street, Canning Town, made the tragic discovery that she had but two halfpennies left in the world, says the London Mail.

A few moments later the light went out, and left the weeping wife in terror that she might never see her husband alive again.

There was but one alternative, which involved a desperate race with death. If Mrs. Tranter could change her two halfpennies for a penny quickly she might be in time to obtain more light while he still lived.

Mrs. Tranter seized the halfpennies from the mantelpiece of the humble bedroom, and, without hat or boots, rushed into the street in the hope of finding some passer-by who could change the coins.

Clerkenwell street, however, is one of those poor and dismal thoroughfares with which Canning Town abounds, and, as it was well past midnight, the roads were almost deserted.

ARRIVED IN TIME.

The distracted woman had to run at least a quarter of a mile before she met a man. "For the love of God," she cried, "give me a penny for these two halfpence. I must see my husband again. I must have light."

Strange though the woman's action must have seemed, the man did as he was asked, and Mrs. Tranter ran back to her dying husband's bedside.

Slipping her last penny into the meter slot, she lit the gas again, and was overjoyed to find that he was still alive.

"Fred," she said, "I have come back to you. What can I do? Is there anything I can get?"

The only response was a feeble movement of the head, and a moment later her husband died.

The man's death was caused by pneumonia, due to want of proper food. His wife and children have been practically starving for weeks, and he had been out of work for more than six months.

FUR ANIMALS ARE GOING

THE ENDESS DEMAND OF FASHION.

The Wild Creatures of the North Are Being Rapidly Killed Off.

During this year's sacrifice of wild birds and animals—slaughtered to satisfy the vanity of fashionable women—it is believed that more fur-bearing animals will be killed than in any of the preceding half-dozen winters, for furriers throughout the country are warning their agents that the passion for furs will be at its height next winter, and that it will be difficult for trappers and hunters to satisfy the demand.

No cause has contributed so largely to the disappearance of wild life in America as has this steadily increasing demand for furs, and it is pointed out as one of the most singular conditions of any country that women, who are looked upon as the epitome of gentleness and sympathy, should be the means of exterminating whole races of wild birds and animals.

During the last twelve months more than 1,000,000 muskrats were slaughtered to be made into fashionable furs. Almost half as many mink were trapped and shot. Yet these represent only two of the scores of species of animals that are called upon to sacrifice their lives at the demand of fashion. It is not improbable that last year 5,000,000 of the creatures of the forest, field and stream were slaughtered, says the Detroit News-Tribune. So furious was the pursuit of fur-bearing animals during those months, and the three or four years preceding, that the almost total extinction of some of the most interesting animals species is threatened.

RICHEST OF FURS.

One black fox makes the hunters season profitable. If it is a poor pelt it will sell for \$500 or more; if it is a good one the hunter may receive as much as \$1,400 for it. The fur of this animal is the finest in the world. It is as soft as sea-island cotton, and every hair is waved. Near the hide it is blackish brown in color, then silver grey, and it is tipped with jet black. For these reasons the animal bearing it is called either the "silver" or the "black" fox.

It may take three or more hunters a whole hunting season to catch enough of these animals to make a woman's jacket, for at least three skins are required for that purpose, and the fashionable dame who gets the fur may have to pay \$4,000 or more for the privilege of wearing it.

The majority of the fox hunters are armed with guns. But guns do little of the work. Across the white waste the man sets out with perhaps a few steel traps, and it may be with nothing but pieces of sharpened whalebone and strings of flesh and fat.

Everywhere are signs of the wild things of the great north—fox and wolf tracks—and occasionally the tracks of bears. But where there are the tracks of a thousand common Arctic foxes there may be only one made by a silver fox, and this the hunter cannot distinguish from the others. So he sets his spring traps. After this he scatters the terrible little "death traps" of the Arctic hunters. These are made of whalebone, each piece about five inches long, and sharpened to a needle point at both ends. Doubling a piece over in the form of a loop, he binds it with a piece of tendon and then wraps flesh tightly about it. Perhaps he scatters half a dozen of these things on the trails of foxes.

HOW VICTIM IS CAUGHT.

A few hours later a fox steals over the wilderness of white. It comes upon one of these little death traps, smells and then slinks back and debates with itself for a few minutes, as all foxes do. There is nothing suspicious looking about the flesh. For a little while the animal nobles at it, until it becomes softened and covered with saliva, then he swallows it. Eight—ten—perhaps fifteen hours, later, the flesh and the tendons become digested, and slowly the whalebone straightens out, and like a relentless dagger pierces the vitals of its victim. In agony the animal dies, and, stretched out on the snow and ice, awaits the coming of the hunter.

It may be an ordinary fox, and, this time, as well as a hundred others, the man is disappointed. In many cases only bits of fur and bones remain to show that the big white wolves of the Arctic regions have been there before him and eaten his game. It may be that once the bits of fur were silvery black, and the hunter knows that he has lost what is to him a fortune. So he follows these great wolf packs closely, slaughtering all of the animals that he can. In this way it follows that in the catching of a single silver fox for some woman in a big southern city a hundred animals may be slain.

HE GOT EVEN.

"Say," asked the wrathful patron over phone, "what do you mean by this item of overtime in your bill? You didn't put in any overtime on my work."

"Yes, I did," soothingly replied the plumber. "You kept me waiting ten minutes that evening while you told me what you thought of me for putting in a full day on a two-hour job."

SOME CALLOUS PEOPLE

RECORDS IN CLEAR HEADS AND HARD HEARTS.

Russian Clerks Laugh at a Murderer—Cyclist Took a Snapshot.

Could anyone conceive of British Government clerks acting as did some of their Russian confreres a year or two ago? It was at the time of the assassination of M. Kantcheff, the Russian statesman. The great Muscovite struggled for life for fully five minutes. He seized and broke the dagger wherewith the assassin attacked him. Then he tried to wrench the revolver from the murderer Krandjoulloff's hand, but failed. The murderer fired six shots, and the last one hit Kantcheff through the heart. Then the assassin coolly sat down on a sofa and blew out his own brains.

All this time a shorthand writer was standing by and a dozen clerks in the outer office, listening to the noise of the tyrant's doom, exchanged winks and grinned. Not one moved a hand to save the Minister. SNAPSHOTTING AN ACCIDENT.

More callous with less reason was a cyclist, who, descending a steep hill at Dordogne, in France, the other day, fell down with his machine just before a cart drawn by a mule. The frightened animal kicked and reared until it finally fell into the ditch by the roadside, taking cart and driver with it. The driver's legs were broken. The cyclist, who was only slightly hurt, was soon on his feet.

Instead, however, of going to the assistance of the man in the ditch, he coolly produced a camera, and took a snapshot of the disaster. Then he mounted his machine and made off.

A callous freak was indulged in at Mersey Park, Tranmere, recently. During the night, someone pulled up the coronation oak planted by Councillor Goodwin, chairman of the Parks Committee. The young tree, it was afterwards found had been thrown into one of the shrubberies. This was the second occasion on which the tree had been uprooted, and each time a cauliflower had been placed in the position previously occupied by the oak.

BURNING THE FIRE HOSE.

Even this outrage was exceeded at the Knaresborough Urban Council's fire-station, by some unknown scamp, the other day. He poured a corrosive liquid over every length of hose in the building, rendering it all quite useless. Ten pounds' reward was at once offered for the criminal's discovery, but so far there has been no result.

There was a tremendous "row" recently in the Austrian House of Deputies. Two members shouted insults at each other, and nearly came to blows. Others chimed in, and there was a free fight. When the dispute was at its height, someone suggested in a loud voice that the President should intervene. All eyes were turned to the Presidential chair, only to see that the President, so far from calling the combatants to order or intervening in any way, was holding a pair of opera-glasses to his eyes, and contemplating with evident satisfaction the violent gestures and grimaces of rage made by those engaged in the scene of conflict.

SCHOONER HOLDS UP A LINER.

Pretty cool was the conduct of the French fishing skipper whose little schooner "held up," on the banks of Newfoundland, the big Hamburg-American liner Auguste-Victoria, on a recent trip West.

The skipper flew the signal "B. M. S.," meaning, "Will you take mail for me?"

Captain Kaempff was so struck by the cheek of the Frenchman that he stopped the liner, and the letters were sent on board.

The Frenchman said he left Brittany a year ago, and thought his wife might be worried. The letters were to ease her mind. At any rate, he thought the end justified the means.

A Paris concierge, or doorkeeper, a lady named Minet, had strong views on the subject of cats harbored by a certain tenant—numbering thirty felines in all. The lady is now the talk of Paris. The other day, when the whole happy family of thirty were basking in the backyard, the concierge bethought her of a plan. Taking a piece of meat, and holding it seductively up to their gaze, she lured the regiment of pussies into her little lodge. There she fell upon them with a stout cudgel and laid about her to such purpose that most of the cats were slaughtered.

Pedro Mendez had more mercy than the concierge. He was a merchant of Seville, and was awakened by a noise at his bedroom door. He found a burglar on the threshold, and at the revolver's point forced him to step inside while he dressed. As the merchant still held the revolver, he could not fasten his tie or shoes, so he compelled the burglar to act as his valet. Then he took him to the police-station.—Pearson's Weekly.

The extent of China's coalfields has been put at 400,000 square miles—more than seventy times the aggregate extent of all the coalfields of Britain.