

## POULTRY



### White Guineas and Their Care.

Guineas on the farm are a very profitable fowl as they have to be fed only when the ground is covered with snow. They save many chickens during summer and fall when chickens go to fields for bugs, worms and grasshoppers, as they always are first to see a hawk if one is in sight, and they will set up a terrible yell. The chickens soon learn what is up and will come flying to the barn for safety. I never knew of a hawk killing a guinea or their young. In the coldest weather they roost with the hens but in mild weather they prefer the trees. They have a way of telling when a cold wave is coming, as they will go for the hen house for lodging. If there is any strange animal prowling around in the night they make a great fuss. As chickens are leaving the trees and coops in summer and fall at daylight hawks put in their appearance for their breakfast and I have shot many from the guineas warning me. They do not have to be kept separate from the fowls nor do they bother the hens as do the pearl guineas (colored). They are excellent for the table as their meat is gamey but not dark. Their lay from May till September. Their eggs are smaller than hen eggs, but bring the same in market. Guinea eggs should be hatched under hens as guineas are a little fast for the little ones to keep up with. When hatched with hens coop the hen for a few days and make a crate so they can't wander away, as they will if not so fixed; but in a few days the hen can be let out and will raise them providing they are not killed by rats or other animals. Feed them just the same as chickens. A good sized hen will cover about 20 eggs and 28 days is the time for incubation. They do not like to have their eggs taken from the nest but should be seen to every day and when they commence to sit should be broken up. In a few days they will go at it again, and will lay about 90 eggs each during the summer. C. A. Knight. Huron Co., Ohio.

### Raising Young Chicks.

This year I will raise only about two hundred chicks, so will do all my hatching with hens. I leave all the chicks under the hen until she is through hatching and until they are all dry. This gives them a good start, as a chick to be strong must not be chilled at this time. When the hen is through hatching I remove her to a dry coop and feed her well with whole corn. Then when the chicks are thirty-six hours old I commence feeding them five times a day, giving them all they will eat up clean of hard boiled eggs mixed with stale bread crumbs, alternating with a feed of cracked oats. Feed this way for two weeks when the feed of eggs and crumbs is left off and a feed of small wheat, cracked oats, and millet is fed alternately. Small grit and fresh water or milk is kept before them at all times. After they are weaned they are put in colony houses scattered over a five-acre patch. Each house has bins of beef scraps, ground bone, and a mixture of grains, including bulled oats, cracked corn, barley, wheat and rye when possible to obtain all of them. These bins the chicks have access to at all times. Just before roosting time they are fed a mash containing oats 20 parts, barley 25 parts, rye 15 parts, corn 15 parts, wheat 10 parts, oil meal 5 parts, all ground together and moistened with water or skimmed milk. If the chicks are kept free from lice they grow very rapidly when fed in this way, and the feeding is done with the least possible labor.

Fred B. Keifer,  
Clark Co., Ill.

### Fowls for the Farmer.

Most farmers are not fanciers and do not breed fowls to sell for breeders to others. Only now and then do we find a farmer that cares to handle a fancy breed because of the plumage, or of the ornament they may be to his lawn. Most farmers want the most useful fowl that can be found. The farmer in breeding should keep this point in mind and should not permit himself to be persuaded to take up with some high-priced breed of chiefly fancy points. If a farmer wants a fowl that he can show and take a prize on let him remember that he can do it just as well with common breeds, provided they are pure, as with some fancy breed of high color. But leaving out the question of shows, the farmer should breed for some utility point alone. Say it is egg production. Let him lose sight of all showing and work to produce egg layers. Let him select continually the best layers for producers. According to the testimony of showmen he will have to say good-bye to his hope for prizes. A noted exhibitor of birds declares that egg laying gets a bird so out of shape that she stands no chance whatever in a show. Yet these are the kind of birds the farmer wants. The most profitable egg producing flocks in the country have been selected in this way and they are not purchasable, as their owners can make more out of them in egg producing than in selling them for breeders. With all such flocks the question of selection is a large one. Culling must be carried on from year to year, and that too relentlessly.

Only the weak have time to worry.



## FARM SCCELLANY

### Dairying in Mexico.

Mr. Lesplasse, the United States consul at Tuxpan, Mexico, in a report to the government, says: "The old methods of milking, churning, and general manipulation of milk products are still in existence here, thereby rendering it impossible to produce good butter. Cows are allowed to roam over the grazing lands and are rarely sheltered or given the least care. The milking process is performed in the most unskilled manner conceivable. The cow is tied by the head, and the operator proceeds to milk the animal in his rough and unsystematic manner until he finally forces a quart or two of inferior milk from the cow's udder. The milk is placed in untidy wooden vessels and transferred to some shed or outhouse, where it is allowed to remain unprotected over night. The following morning the cream is skimmed and either beaten with a forked stick or violently agitated in a bottle until the butter granules are formed. It is then indifferently washed and offered as butter. It quickly turns rancid. It sells at from 20 to 40 cents per pound United States money, and is good neither to look at nor to taste. The sour milk is compressed in a coarse cloth, salted and allowed to dry for several days. It is then an insipid, spongy mass, which sells for from 5 to 8 cents (U. S.) a cheese. Each of these cheeses is round, about an inch thick and about 8 inches in diameter. They find a quick sale in this market. Such a thing as the most simple, modern dairy appliance is unknown or at least not used.

### New eMat Preservative.

A new meat curing process is reported from Germany, where Professor Emmerich claims to be able to preserve meat in a fresh condition by injecting into the veins of the dead animal acetic acid. The blood is first permitted to run out and then the acid is put in. It permeates the flesh, so the professor claims, and that prevents all decay and makes the use of refrigeration unnecessary. It is obvious that if this process proves to be all that is claimed for it, it will revolutionize the meat curing industry, as acetic acid is not an expensive preservative. The reports say that meat so cured has been shipped from Germany to South African ports and was found on arriving at its destination to be of good quality and perfectly preserved. Our readers must remember however that great things are claimed for all new processes.

### Feeding the Bull.

The feeding of the bull is a very important matter, more so than the feeding of the cow, for the reason that the bull is generally kept up all the time. Under such an abnormal condition he becomes too fat if he is fed a too large ration of corn. It is better to feed him on a mixed grain ration, including oats, and to give him a rough feed rich in nitrogen rather than rich in carbon. Bran, which is comparatively low in carbon and high in nitrogen, should be a part of the daily ration. For the bull at least roots should be fed in considerable quantities, unless he has an abundance of exercise, which most of our bulls do not get. If under a properly balanced ration the bull becomes too fat it is indicative of a lack of vigor, and such a bull should be disposed of and one substituted that has the vigor desired.

### Reject Decayed Food.

The farmer is sometimes tempted to feed decayed or musty food to his poultry. It should never be done. Just what effect it might have on the eggs produced by the fowls we do not know, but it may have a very serious effect on the digestive apparatus. We have seen it urged not to feed such foods because they would give to the eggs the same taints they had themselves, but this may be doubted. One writer tries to prove his case by asserting that onions fed to fowls produced the smell of onions in the eggs. This may well be true, as the onion contains a very penetrating oil that will pass through the systems of most animals. It will appear in the egg of the hen or the milk of the cow. But that does not apply to the general run of foods. They should be rejected, but rejected for the reason that they endanger the health of the birds.

### Green Manuring Crops.

There are many soils that are not benefited by green manuring crops. Such soils are those already rich in nitrogen and in humus. An investigation by the University of Illinois has shown that on many of the soils in Illinois an addition of humus and of nitrogen would be a positive detriment. This leads to the remark that we must have a reason for every farm operation. The green manure crop is needed on the soil that is deficient in humus and nitrogen, but is labor lost on many other soils. It is obvious that we cannot lay down rules that can be followed blindly on all farms. The green manuring crop is valuable where it is needed, but worthless or worse, where it is not needed. The intelligence of every farmer must determine the necessity for each operation on the farm.

Many failures with incubators are due entirely to ignorance in those trying to run them. In this, as in everything else, a person must learn how.

## He Needs No Sleep

"How is it that some persons want much sleep, some can do on little, while there are still others who can get along without any sleep at all?" asked a writer in the New Orleans Times-Democrat. "Now here is a problem, a solution of which might prove a vast benefit to humankind. I am reminded of the importance of the subject by a case to which my attention was recently called in New Jersey. Albert Herpin of Trenton, born in France, a hostler, declares that he has not slept a wink for ten years, and his statement, according to the New York Herald's correspondent, is borne out by the physicians who have at different times treated him for insomnia.

"Of his case Herpin says: 'I have been to hospitals, where they attempted to drug me in order to produce sleep, but I would not undergo that sort of treatment. I have given up the idea of sleeping for the rest of my life; in fact, I'm so used to it that I think no more about the matter. I've heard of people going insane that were troubled with insomnia, but I never will. I am well and eat three meals a day.'"

"It would seem from this that sleep is not one of life's essentials. Is sleep absolutely necessary to healthful existence? Is it possible for men to live to the reasonable and average

age without sleep? These are large questions and they ramify in many ways when one begins to deal with them speculatively. In the first place much will depend upon the type and temperament of the man. Persons whose mental capabilities are of a low order, whose receptive powers are limited, and who are without the afflatus which gives a rich poetic color to the things of this life—persons who are sluggish mentally and temperamentally, and who feel only when pricked and prodded by the sharp exigencies of the struggle for existence, the 'dumb, driven cattle' of the world, must needs sleep much, whereas the men and women of a sensitive mold, whose minds are as fragile and responsive as the most delicate of photographers' plates, who catch and hold, and love the images as they flit in variant shadings—the men and women who mentally trace the very finest of the nuances and absorb much of the forces which play upon them—such as these may do on less sleep than persons of the dull, unresponsive and unpoetic type. Napoleon required but little sleep, but, as a great American who was once reminded of the fact remarked, all men are not Napoleons. I have known many men, well advanced in years, who actually slept less than younger and more vigorous men."

## Centers of the Brain

Biologists admit that psychic centers are localized in the cortex of the brain. The function of language, for example, is perturbed or suppressed when a certain portion of the frontal lobes of the brain is altered or destroyed. Dr. Grasslet, in a recent work on "Spiritism," holds that the centers of automatism and sub-consciousness form together a kind of polygonal area. In the Revue de Philosophie he also discusses the question of an immaterial soul and its relation to these psychic centers of the brain, and he concludes that the two conceptions are not incompatible. Intelligence, he argues, is a faculty of the soul. One cannot localize it in an organ. The psychic function, however, is more complex. It comprises the immaterial intelligence and the thought expressed, associated as we observe it in human life. For this psychic function a material organ or instrument as well as the immaterial intelligence is required, and this organ is the cortex of the brain. Whether the psychic center of the cortex only serves to clothe the idea, to express the thought, or intervenes otherwise,

what does it matter to the biologist so long as he can localize the center? These centers of the brain are as indispensable for the expression of the highest intelligence as for the lowest automatism. Consequently the biologist may endeavor to localize the centers of higher as well as of lower intelligence. This quest, however, is distinct from the study of the principle of intelligence. Hence psychology should not become a department of biology. Psychology is the science of will and conscience. Biology is the science of the cerebral instrument whose intervention is necessary for the regular working of that will and conscience. Each of these two sciences has its own domain, and there is no contradiction between them. It is curious to find that after going from one extreme to the other, from the notion of a purely immaterial to a purely material mind, to a brain "secreting thought" as an electric battery secretes electricity, scientific thinkers are coming round to the union or conciliation of the two conceptions—namely, a brain which is the material organ of an immaterial soul.—London Globe.

## The Horses of Mexico

Although at the time of the conquest horses were unknown in Mexico, that country today boasts of some of the finest of the species. The horses of Cuba that were taken to Mexico as well as the horses that went to the River Plate on a similar errand of conquest are believed to have been of Andalusian breed, and Cunningham Graham, the famous British author and traveler, who knows from personal experience both Mexican and Argentine horses, holds that we must look to Barbary for the progenitors of the Cordobese horses. "Most horses," he says, "in fact, all breeds of horses, have six lumbar vertebrae. A most careful observer, the late Edward Lanson, a professor in the Agricultural college of Santa Catalina, near Buenos Ayres, has noted the remarkable fact that the horses of the Pampas have only five. Following up his researches, he has found that the only other breed of horses in which a similar peculiarity is to be found is that of Barbary."

So Cunningham Graham, who has ridden the horses of the Moors in Morocco as well as the horses of Mex-

ico and the Pampas, is of the opinion that these horses are evidently descended from those of Barbary.

Of late years thousands of American horses have been imported into Mexico, often thoroughbreds, and undoubtedly the type of the Mexican horse of today has changed somewhat through the infusion of new blood. Some one competent and with leisure (and it is indispensable that he be a lover of horses) should take up this theme of the Mexican horse and make a big book on the subject.

Anyone who has ridden the wiry and long-enduring little Mexican horse will not need to be told of its good points. Not infrequently is he a "wind drinker," like the horses of the African desert, full of speed and tireless. Given a grassy plain of a league or more, a "caballo bravo," a horse of mettle, the crisp air of the tableland morning in autumn or even in March and a man may taste one of the joys of paradise, for who may say that our horses will not meet us gladly over there in the good country where go the noble riders and lovers of swift steeds?

## Cupid Ever at Work

Long ago the silly odium that attached to old-maidship disappeared, but even in the days when popular notion made a spinster of 40 a hopeless old maid, records show that there was no age limit to matrimonial hopes.

For instance, so long ago as 1774, Miss Jane Hodgson of Steppey, England, was wedded to Henry Hulston, of the same place, when she had reached her 92d summer, and the bridegroom was two years older, says the Philadelphia Inquirer.

More remarkable was the wedding of John Jackson and Annie Bates, on March 22, 1796, the 101st birthday of the bridegroom, who was three years older than the bride. It was his fourth marriage within two years, and 10,000 persons escorted the couple to the church.

A youth of 19, a son of Mr. Graves, of Balcock-on-Herts, married "Miss Lake, spinster, aged 76," April 20, 1731, and in August of the same year, at Bath, Capt. Hamilton, aged 50, married Miss Mansson, a blushing bride of rank, fortune, and 85 years.

More than half a century ago a Yorkshire belle, who had so many suitors she could not choose among them, told one of the most persistent that if he would ask her 50 years later she would marry him. He waited loyally and faithfully for the 50th anniversary, and she, too, kept her word.

A celebrated French artist, who fell in love in his student days, was told by the maiden that she would never marry so long as her mother lived. They waited half a century before they were united.

Only two years ago a wealthy maiden lady in an English county provided a delightful sensation by marrying the curate of her parish church, a young man exactly 60 years her junior. An astonishing feature of this marriage was that as a girl the aged bride had been engaged to the curate's grandfather, and perhaps it was the memory of this ancient romance which inspired a sentimental regard for the youthful clergyman, who under other conditions might have been her own grandson.

## SCIENCE and INVENTION

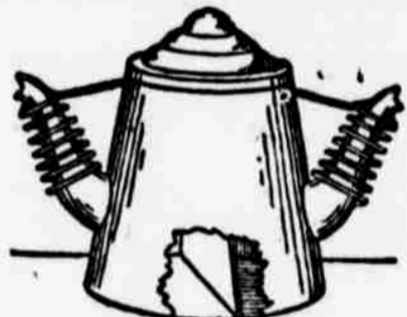
To Prevent Rear-End Collisions. A model illustrating a method of averting a large class of railway accidents that are known as rear-end collisions was exhibited a short time ago in New York city.

On the track, 30 feet from the ordinary semaphore, is placed a dwarf semaphore, whose movements are made to correspond with those of the other, whether the latter is operated by hand or electricity. From the side of the locomotive projects downward a rod of glass, in such a position that it will strike the dwarf semaphore when the signal is set at danger. Contact breaks the glass. The immediate effect of this is to bring into play in the cab a steam mechanism which shuts the throttle, locks it, applies the air brakes, and finally deposits sand on the track. Only when the train stops can the engineer unlock his throttle. He must first adjust a fresh glass rod in place of the broken one. Thus an effective safeguard is provided against running past a signal on account of the sickness, death or carelessness of the engineer, or fog or smoke.

The apparatus is so designed that if the engineer, having his wits about him, and having his train under control, wishes to do so, he can prevent the smashing of the glass rod and run slowly to the main semaphore. To keep the rod from hitting the dwarf semaphore, he touches a mechanism in the cab which shifts the position of the "destructible member," and saves it from injury. When he does so, however, a record of the time is made automatically on an indicator, so that he cannot play any tricks without the fact being known.

### Each Spout Is a Handle.

To obviate this difficulty many a hostess provides both in sufficient quantity to meet the wants of her guests, necessitating the use of two pots and two stands. Why not dispense with this trouble and utilize the combination tea and coffee pot which has recently been designed by a Pennsylvania inventor? As the illustration shows, it is capable of pouring a cup of either beverage on a moment's notice, and that, too, without burning the hand by contact with either spout handle. As will be seen, the two spouts, which also serve as handles for the pot, are surrounded by coils of wire, which prevent the hand from grasping the heated metal when reversing the pot to pour a cup of drink from the spout that has previously been used as the handle. The pot is divided through the center by a partition which reaches from top to bottom, and when it is not desired to utilize it for brewing two beverages at the same time one side can be filled with hot water, for the double



purpose of maintaining the warmth of the coffee or tea and for use in weakening the beverage should it prove too strong.

Harry W. Gander of Rudy, Pa., is the inventor.

### A Collapsible Stretcher.

It has been said that Japan went to war with China simply to secure the discipline and training necessary for the impending conflict with Russia, which is but another example of a nation profiting by the motto, though admittedly peculiar in the manner in which it was carried out. But nations are not alone in heeding this admonition. The inventor has taken it upon himself at all times to strive for the improvement and advancement of all that goes to make war terrible, from the ship-burning mirror of Archimedes to the rapid-fire gun of the modern inventor. But if war has been made more horrible, the hospital equipment has in a measure kept pace with it from the humane point of view, until the sick or wounded men can now be properly cared for until claimed by the grim reaper or restored to health, with the chances more in favor of the latter outcome than they were even a few years ago.

In the matter of stretchers for carrying the wounded from the field of battle the hospital corps may be interested in the idea of a Swiss inventor. It consists principally of a set of lacy-tongs, with a canvas cloth extending from head to foot when the stretcher is extended. The handles by which the carrier is lifted are attached to the lower section of the folding frame, serving to fold the stretcher when they are turned down against the legs and to extend it when in position to carry a wounded soldier off the field.

### Human Passions Photographed.

Some photographic records of human emotions, obtained at Geneva by Dr. E. Magnin and M. Edward Flegenhaimer, are of remarkable interest. The experiments have been made upon a very susceptible hypnotic subject, who has been influenced by both musical and oral suggestion, and the entire range of human passions—joy, anger, fear, sadness, sluttiness, greed, etc.—have been recorded in about 500 photographs of the woman under the various forms of suggestion. The intensity of the expressions is said to have been rarely equalled by the great artists.

## An Attractive Cottage



Here is a plan for an attractive cottage that can surely be built for \$1,000 anywhere. Entering the house you find yourself in a fairly large hall, with an attractive staircase immediately before you, and on the right a cheerful sitting room. The staircase is designed with a seat at one side, and is an open stair to the first landing, with nicely turned balusters and rail. The space under the stair is used as the stair to the basement from the combined dining room and kitchen.

The sitting room has a corner arrangement, showing a pleasant bay to form a sort of alcove addition to the room, yet the expense of it is not great, as it is partly supported and roofed by the porch, and the remainder extends over the foundation. The dining room and kitchen are combined, with a pantry and wash room. The downstairs bedroom can be used as a library, if desired, cutting out the closet, and having a large case opening between this room and the sitting room.

On the second floor there are two bedrooms, one on each side of the hall, which are lighted by the dormers, as is seen by the exterior view. This dormer also gives good ventilation, as the transoms over the bedroom doors give a circulation of air through the second story rooms. Although it may appear in the exterior that there are sloping ceilings in the second floor bedrooms, such is not the case to a great extent. There is only a foot cut off of the wall and ceiling for the roof. There is a single chimney, and it is nicely located for heating the house either with stoves or a furnace. At each side of the second floor bedrooms are large spaces left under the roof, which make excellent storage closets.

The house is 24 by 28 feet. The interior woodwork is finished in natural finish, and half of the space under the first floor is excavated for a large cellar.

### Cement Anchor Posts.

C. C.—How would cement answer for constructing anchor posts for a fence of 11 strands of coil spring wire; the posts would be sunk 5 or 6 feet in the ground. In what proportion should cement and sand be mixed?

Cement answers well for making ordinary fence posts, but where there would be a side strain, as on an anchor post it would be well to build iron rods into each post; this would add greatly to their strength. The cost of concrete anchor posts would require to be composed of one part cement to five parts of gravel, which would require a barrel of cement for 20 cubic feet of posts, so that each post would require nearly half a barrel of cement.

### A Tonic for Fowls.

Mrs. M.—Would a small quantity of ground gentian, say a quarter of a teaspoonful, fed in a mash once a day to a dozen hens, be harmful or beneficial to the fowls? They get no vegetables, only a few boiled potatoes daily.

If the hens appear to be down in condition and need toning up, a small quantity of ground gentian fed daily as indicated would undoubtedly prove beneficial. It is not advisable, however, to be dosing healthy fowls, but a light tonic at the end of a long winter should be all right until the birds can get out to the green grass.

### Feed for Chickens.

Mrs. J. P.—Last year I hatched chickens with an incubator, but they died when a few days old. They appeared to have bowel trouble. I gave them curd and bread soaked in milk. Was this proper food for them?

Chickens should receive no food for the first thirty-six hours, and then they should have light food such as bread soaked in milk and squeezed almost dry, besides coarse cracked wheat or oats groats. Curd is very indigestible and likely to cause bowel trouble.

### Cabbage Maggot.

F. R.—What will destroy the little white grubs that are hatched around the roots of young and early cabbage plants?

For the cabbage maggot, probably the easiest and best remedy is pulling away the soil down to the true roots and pouring in about a tea-cupful of a tea made by soaking one or two ounces of pyrethrum insect powder in a gallon of warm water and then pulling the earth around the roots again.

### Converting Silo into Root House.

T. A. C.—I wish to convert a silo into a root house; it is constructed of 10-inch studding, double boarded and paper between. It is inside of the barn and the bottom is 12 ft. with the barn floor. How can it be made frost proof?

Probably the best plan to follow would be to fill in between the studs and on the ceiling with dry sawdust. A double door would be necessary to keep out the frost.