

AGRICULTURAL.

Combined Grain, Poultry and Hog House.

The accompanying illustration shows an arrangement by which the poultry, grain and hogs can be brought into proximity, — an arrangement calculated to lessen the work of caring for both kinds of stock, for both are, to no inconsiderable extent, fed on grain. The plan calls for a story and a half building with two wings, — one of the wings for the accommodation of hens and the other for the hogs, pens for each being arranged along the sunny side, with a walk extending the length of the other side. The central grain building has a chamber where a part of the grain can be stored in bins, the latter having chutes to convey the grain to the first floor. If this central building can have a cellar, so much



CONVENIENT COMBINATION FARM BUILDING.

the better, for in this can be stored roots and vegetables for the use of the fowls and hogs, the cooking of these being done in a boiler set on the first floor. The building should be so arranged that runs and outside pens can be arranged in front of corresponding inside pens in the two wings. The building should be upon well-drained ground.

Raising Cows or Buying Them.

Beginners in dairying will perhaps appreciate a bit of personal experience upon this subject. It is natural for the man who takes pride in his herd to wish to have fine cows. This is not only pardonable but commendable. Not every man can afford to buy blooded stock, at least more than a few animals to start with. To such I would say that there is no need for being disheartened if such is the case. A good bull, however, is in dispensable, and it is a good investment to purchase such a one. In selecting him do not look at his pedigree alone. It may be long and full of high-sounding names, yet that would be poor recommendation unless the animal corresponds with it in individual excellence. A yellow skin, fine tail with heavy switch, prominent veins upon the belly with the holes through it which are called "milk wells" in a cow, are some of the main points to look to.

Such an animal when mated with common cows will produce calves which will show the sire's breeding clearly, and if heifers, when they come to milk will prove the saying that "the bull is half the herd," and more too.

The purchase of a well bred heifer calf will be not much of a drain upon the purse, and in a few years the foundation of a herd so humbly begun will begin to assume greater proportions. It is like compound interest, it counts up fast when two or three cows have each a calf once a year. If one has the good luck to have heifers, a herd of thoroughbred cows of considerable numbers will be had in a few years.

In the meantime, those half-blood heifers are no disgrace to the herd. We have now a dozen or more in milk—grade Guernseys mostly—which tested from 4 to 6 per cent. butter fat from a composite test. Only one of the lot tested as low as four. The mothers were just average native cows. The offspring from those half-bloods will without a doubt be better than this.

As to persistency of milking, these heifers go dry only a few weeks, usually from three to four, and no doubt would milk longer if they were encouraged to do so. We do not consider it best for any cow to give milk for the entire period between birth of calves. It is not only too great a strain upon her constitution, but it shortens her period of usefulness as well. For sanitary reasons the milk is not fit for human consumption during the period known as "making bag," when the udder is being filled with milk intended for the needs of the coming calf. Another reason to be urged against continuous milking is that the udder has no chance for expansion, hence the milk flow is considerably less than it would be were she allowed to go dry a few weeks. A cow which gives milk continuously is like a spayed cow, in one respect, her milk grows less and less with each passing year.

But to return to the subject: The man who goes out to buy cows is much like the one who buys a lottery ticket. He may draw a prize, but the chances are against it. Most of the cows for sale are offered because they are not wholly desirable to their owners. A good judge of dairy cows may be able to make a desirable selection, but many more would make a poor one. Then, too, it requires the outlay of considerable capital to buy enough cows to start a dairy. Unless this is no objection, the prospective dairyman had better follow the grading up plan, and raise his own cows. This is by far the most satisfactory, to my way of thinking. One knows his cows; he has the training of them from the start, and can feed and care for them in a manner tending toward the proper development of them. But never, under any circumstances, try to start such a herd without the thoroughbred bull. He is indispensable.

Grain-Feeding Stock on Pastures.

Good pasture composed of good grasses, or, better, a mixture of grasses and clovers, is almost a perfect food for horses, cattle, or sheep, and is desirable for hogs. Over much of our country a pound of meat or of milk is most cheaply produced when the producer gets its food by grazing good pastures in good condition. The weight of evidence is against the profitableness of feeding

stock grain when they have an abundant supply of pasture in its best condition. The weight of evidence seems to be in favor of giving grain to some classes of quite young animals even when they have good pasture. This seems true of colts, of calves in many cases, and experiments at the Wisconsin station show a good profit from giving lambs designed to be sold as fat lambs a moderate grain ration both before and after weaning. For most farmers it is clearly a mistake not to feed suckling sows and the pigs pretty liberally, however good the pasture may be. The evidence as to the desirability of feeding grain to cows giving milk when they are on pasture is conflicting. In a number of trials the direct effects did not show a profit for grain feeding; that is, the increase in either milk or butter did not equal the cost of the grain. But the good effect in maintaining the cow in good condition and, probably, helping the cow maintain a good flow for a longer period, is such that it is probably profitable to give some grain even when the pasture are at their best. Obviously it is a mistake to withhold extra feed when the pasture begin to fail, or when excessively hot weather or a plague of flies makes it an extra labor of the cows to get all they need.

As to what this extra food shall be there is room for difference of opinion. The green food secured in the pasture is sufficiently nitrogenous, and is of such a nature that the stomach and bowels of the cows are usually in good condition, including to over looseness rather than being constive. Relative price will be a large factor in choosing. The pasture will do excellently in the way of securing a large flow of milk. Maintaining or increasing the flesh of the cows is a chief point to be considered. It is of doubtful economy to feed any large quantity. The cows should retain a good appetite for the grass. As the pastures grow short or the grass becomes less palatable heavier feeding is indicated, and it will be wise to give more bran or shorts, and in many cases, give some gluten feed or a little oil cake.

ENGLAND'S CHEAP TELEGRAMS.

For 12 Cents Twelve Words Will Go to Any Part of the Country.

The total cost of all the telegraph lines in the United Kingdom in 1870, the year that they were acquired, was \$53,528,000. The government set about immediately to extend the wires to every village of any importance, and to connect the cities and towns already equipped. Before government purchase the telegraph lines were owned by numerous companies, which strung their wires only in and between the cities from which they were practically sure of receiving profitable returns. To remedy this defect over 15,000 miles of wire were laid the first year that the government owned the lines.

Since 1870 the telegraph has become common in nearly all parts of the world; in no country is it used more in business and social intercourse than in England. Governmental ownership there has meant reduced tolls; tolls so cheap that we open our eyes when we learn that a telegram of twelve words may be sent to any part of the kingdom for 12 cents. For this 12 cents in England the message is delivered within one mile of a head office or within the postal limit. Beyond the limits an additional charge of 12 cents is made.

In England the telegraph is operated in connection with the mail service; that is one great reason why the service is made so cheap. The English government does not consider the telegraph service as a means of revenue for the treasury, however, but as a means of information for the whole country, giving facilities of all kinds for its use and extension in all classes, knowing that the treasury will benefit indirectly from the augmentation of the general wealth. In 1870 the total messages transmitted did not reach 7,000,000. In 1893 the annual total was over 70,000,000. In 1869 the English newspapers sent 22,000,000 by telegraph. The total to-day is over 600,000,000. Mr. Martin says that the service is performed with perfect punctuality. Seven to nine minutes are required for the transmission of a message between two commercial cities, while in 1870 two or three hours were necessary.

PEARLS OF TRUTH.

Honey, by some sweet mystery of the dew, is born of air, in bosoms of the flowers. —Rucellai.

The ancients tell us what is best; but we must learn of the moderns what is fittest. —Franklin.

Whilst we converse with what is above us, we do not grow old, but grow young. —Emerson.

Consider man, weigh well thy frame; the king, the beggar, are the same; dust-formed us all. —Gay.

The man who can be nothing but serious, or nothing but merry, is but half a man. —Leigh Hunt.

It is the constant fault and inseparable evil of ambition that it never looks behind it. —Seneca.

There are no rules for friendship. It must be left to itself; we can not force it any more than love. —Hazlitt.

The passion of acquiring riches in order to support a vain expense corrupts the purest souls. —Fenelon.

Friendship is the shadow of the evening, which strengthens with the setting sun of life. —La Fontaine.

DELUSIVE STICK INSECT.

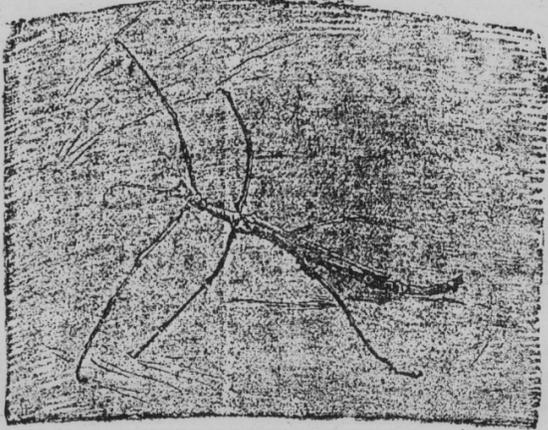
CANNOT DISTINGUISH IT FROM A TWIG WHEN IT IS STILL.

One of a Remarkable Family—Some of Its Relatives Pray and Others Practise Various Deceptions—They Also Fight—Many of Them Are Very Large.

Unique among the insect creation are the stick insects, which have the peculiar gift of making others believe that they are inanimate objects. This insect is commonly met with in the high, dry, yellow grass of Nyassaland, in South Africa. When it is in repose, with its legs stretched closely against its back, it is difficult to believe that it is not a dry twig. It is necessary to touch it in order to find that it is alive. The insects smaller and weaker than itself which do this are eaten as a reward for their inquiring spirit.

The twig insect undoubtedly lives by its shape, which helps to provide it with food at a minimum of exertion. It enables it to escape from all sorts of dangers. Other animals with a taste for insect food seldom detect it owing to its twig-like appearance. Moreover, it is hardly worth their while to trouble about such an elusive animal.

But no animal seems born to enjoy this life without worries and enemies. It appears that there is a curious and large toad that makes a specialty of finding twig insects.



MAGNIFIED VIEW OF THE STICK INSECT.

This toad would rather hunt twig-insects than eat the juiciest and most easily caught green flies.

The stick insect is a member of the mantis group, several members of which have remarkable qualities. One of them, perhaps the best known, is the praying mantis. When in repose it appears to be on its knees, and its forelegs are raised and clasped together like the hands of a person at prayer. As it has large eyes, which it turns upward, its whole attitude suggests that it is engaged in earnest prayer.

The mantis family includes the leaf insect, the spectre insect and several others. They have the power of imitating leaves and blades of grass.

The mantidae have a narrow, compressed and elongated abdomen and a long thorax. The head is triangular, with two large eyes, three small stemmata and long, bristle-like antennae. The wings fold in fan-like manner, and the wing-covers are long, narrow and thin.

The second and third pair of legs are long and slender and are used only for locomotion. The first pair are used as weapons of combat and instruments of prehension, and in the case of the praying mantis for the purpose of deluding the pious. One part of the leg closes on another so tightly as to cut like a pair of scissors. All the mantidae have a habit of waiting for their prey.

Many of them—as for example, the stick insect—are very large. Some South American ones are four inches in length. They are usually very pugnacious, fighting much among themselves. A fight usually ends in one of the combatants losing his head. The victor eats the remains.

The Chinese catch specimens of one mantis family and set them to fight, betting on the result.

A REAL HERO.

Who Would Have Sacrificed All for His Country.

The Mexican Chamber of Deputies has granted a joint pension of \$500 per month to the three minor sons of the late General Nicolas Regales, a hero of the war of the French intervention. As soon as one of them becomes of age the pension ceases for him, and his portion goes to his younger brothers, stopping entirely when the youngest reaches 21 years. The sons of General Regales, in company with the remainder of the family, bear the distinction of having been shot at purposely by their father during one of the fiercest battles against the Emperor Maximilian. Regales had charge of the assault against the French, who were strongly fortified in the State of Michoacan. The General had become surrounded by the French army and taken prisoner. So fierce was the attack of the Mexican forces that the French saw nothing but capture in store for them unless the bombardment could be stopped. As a last resort the wife and children of General Regales were brought forth and exposed before the Mexican guns, in hopes that their fire would cease. Instead of that Regales ordered a more desperate charge, saying that patriotism and the country's cause must make him murder his own family if freedom demanded such sacrifices. The family almost miraculously escaped harm and the boys are now prominent young men, who live to honor the patriotism of their father.

COSTLY JEWELS.

One of the Duchess of Montrose's Necklaces Sells for a Fortune.

Something akin to the excitement of gambling exists in the purchase of jewels by auction. At all events, there was considerable sensation among the spectators who crowded Christie's rooms in London the other day, when the principal items of the valuable collection of the late Dowager Duchess of Montrose were put up for sale, more especially when the auctioneer exposed to view a magnificent necklace of 362 fine pearls, weighing 3,750 grains, arranged in seven graceful graduated lines, clasped with a diamond pave tablet snap. The bidding began with an offer of \$5,000, rapidly advanced by 500s to \$8,000, and then by hundreds to \$8,300. By smaller bids it reached \$10,000 amid applause, and the hammer descended at \$11,500. A single-row necklace of 50 pearls, which formed one part of the grand necklace was sold separately for \$320. A diamond tiara reached \$1,000 and a diamond necklace \$1,065. Out of the proceeds of these valuable jewels the late Dowager Duchess of Montrose ordered by her will a sum of \$2,000 to be paid to the Bishop of London, for the benefit of the East End poor. Among other notable jewels were a brilliant bracelet, with fine pearl-and-brilliant cluster center \$485; a brilliant crescent brooch, \$335; a brilliant ribbon pendant, with festoon and drop brilliant, and fine pink black and white pearl center, \$485. Of the objects of vertu, a Louis Seize oval gold box, beautifully chased and adorned by Petitot, realized \$210.

NOT FOND OF DAILY BATHS

FRENCH AND GERMANS DO NOT FOLLOW THE ENGLISH CUSTOM.

Bathrooms Scarce in Paris—More Numerous in Berlin, But Used Only Occasionally—The German Takes to Water for House Cleaning and Street Cleaning.

The English seem to be the only people in Europe who bathe every day. The characteristic Englishman has always a well-scrubbed and shining appearance. The chief charm of the English girl, is her indescribable pink and white freshness. She is so immaculately clean and sweet and fragrant. Her cheek has the delicate transparency of an egg shell or the glow one sees in the inside of a sea shell that the waves have washed day after day. That may be due partly to the fact that the moist climate of sea-girt England is extraordinarily good for a delicate epidermis, but doubtless part of that transparency and glow is to be ascribed to the fact that her morning bath brings every day of her life the warm color to her skin and the glad rush of blood through her system. And her mother before her and her grandmother before her mother took a daily bath just as she does. All that soap and water and brushes, that rubbing and polishing can do has been done for her. This effect cannot be attained in a fortnight.

Every self-respecting Englishman "takes his tub," as the phrase is, every morning. A person who is in the habit of omitting this daily ceremony would not be considered worthy of entrance into respectable English society. An Englishman's bathtub vouches not only for his respectability, but also for himself as a man of property. When actors don't pay their bills hotel keepers have a way of confiscating their trunks. If travelling Englishmen didn't pay their bills their creditors would have to be satisfied with their bathtubs, which serve them as trunks. They don't like trunks, "boxes," as they call them.

It is a funny sight to see an English family arriving anywhere. Their luggage seems to consist of several bathtubs, a baby carriage, and innumerable hat boxes. The tubs and the baby carriage are filled with small packages, in which the family wardrobe apparently is stowed away. Bathtubs, baby carriage, handboxes, and a few boys and girls are all stowed away in the dog cart, which goes bowling away from the station behind the big carriage in which the parents sit. Therefore one sees that a bathtub may have various functions.

Such customs are unknown on the Continent. A bath is there seldom regarded as a pleasure, and only occasionally as a duty. Du Maurier gives a comical, but significant, picture of Svengali's horror at learning that each of the three English artists—Taffy, Little Billee, and the Laird—was in the habit of taking a bath every morning. In France people wash their hands and faces every day, their feet once a week, and their bodies once in three weeks. An American girl who was sent last year to an aristocratic convent in Paris, where the daughters of the first families in France were being educated, was very much horrified to find that only once in three weeks was she expected to disturb the routine of the school by taking time for anything so unreasonable as a bath. Even the newest and most fashionable houses in Paris seldom have bathtubs, although they may have all the other modern improvements, such as electric bells and speaking tubes. There one orders one's bath from a public bathhouse, and the hot water is brought around at the appointed time and is carried up to one in pails.

The Germans are not much better. A daily bath is not often regarded by them as a necessity, although their best houses are now provided with bathtubs, so that, in their case, the spirit seems to be willing even if the flesh is weak. It seems strange that such a strong, sturdy folk as they are should appear to have a feeling of antagonism to some of the things which others are prone to regard as necessary to health. Baths may come under this head, and also fresh air, which is most objectionable to the German Hausfrau. She has her rooms shut up from the beginning of winter to the beginning of summer as tight as a drum. The sleeping rooms are no exception to the rule. The consequence is, of course, that they all smell close and stuffy.

The texture of the German girl's cheek lacks the fineness of the English girl's skin. She has just as much color—more, perhaps—but it is as if some clumsy hand had put a smooth, even coat of vermilion paint on the opaque skin of an apple. The color in the face of the men, if one looks at it critically, appears to come from the even reddening of those tiny facial capillaries, which bear drinking colors and enlarges. It seems strange that the Germans should be so adverse to the personal application of water internally and externally, when they use it so freely and advantageously in other ways. They are always scrubbing their houses, their doorsteps, and their streets, and German towns are beautifully neat and orderly. The Germans themselves like to go, in the summer time, to watering places, but as George Eliot says in her sketch called "Three Months in Weimar," their Waschungstrieb seems to assert itself only at a particular time of the year. For the rest, "a decanter and a sugar basin or pie dish are an ample toilet service for them."

Burgling in China.

The Chinese burglar takes an ingredient of his own, burns it, and blows the smoke through the keyhole of the bedroom where the master of the house is asleep. The fumes dull the senses of the victim just enough to make him helpless, while at the same time permitting him to hear and see everything that goes on in the room.

In the Account.

Hotel Clerk—That Mr. Wayback, in room 979, blew out the gas last night, and is dead. What shall I do?
Proprietor (bustly)—Charge his estate \$20 for extra gas.

STARVATION.

How It Feels to Undergo Its Pangs.

For the first two days through which a strong and healthy man is doomed to exist upon nothing, his sufferings are, perhaps, more acute than in the remaining stages; he feels an inordinate, unspeakable craving at the stomach night and day. The mind runs upon beef, bread and other substances; but still, in a great measure, the body retains its strength.

On the third and fourth days, but especially on the fourth, this incessant craving gives place to a sinking and weakness of the stomach, accompanied by nausea. The unfortunate sufferer still desires food, but with a loss of strength he loses that eager craving which is felt in the earlier stages.

Should he chance to obtain a morsel or two of food he swallows it with a wolfish avidity; but five minutes afterward his sufferings are more intense than ever. He feels as if he had swallowed a living lobster which is clawing and feeding upon the very foundation of his existence. On the fifth day his cheeks suddenly appear hollow and sunken, his body emaciated, his color is ashy pale and his eyes wild, glassy and cannibalistic. The different parts of the system now war with each other. The stomach calls upon the legs to go with it in quest of food; the legs, from weakness, refuse.

The sixth day brings with it increased suffering, although the pangs of hunger are lost in an overpowering languor and sickness. The head becomes dizzy; the ghost of well-remembered dinners pass in hideous processions through the mind.

The seventh day comes, bringing increasing lassitude and further prostration of strength. The arms hang listlessly, the legs drag heavily. The desire for food is still left to a degree, but it must be brought, not sought. The miserable remnant of life which still hangs to the sufferer is a burden almost too grievous to be borne; yet his inherent love of existence induces a desire still to preserve it if it can be saved without a tax on bodily exertion.

The mind wanders. At one moment he thinks his weary limbs cannot sustain him a mile; the next he is endowed with unnatural strength, and, if there be a certainty of relief before him, dashes bravely and strongly forward, wondering whence proceeds his new and sudden impulse.

A Curious Royal Collection.

One of the most curious collections in the world is one upon which the Queen of Italy has been engaged for years. It consists of old boots, shoes, and slippers, to many of which a historical interest attaches. Queen Margaret is the happy possessor, for instance, of a pair of coarse, heavy shoes that are said to have belonged to Joan of Arc; she has also a dainty pair of boots supposed to have been worn by Marie Stuart at her execution, as well as some slippers of Marie Antoinette and the famous beauty, Ninon de Lenclos, of whom tradition says that she had lovers after she had reached the age of four-score. Somebody has suggested that it is possibly the fact that the kingdom of Italy is shaped like a boot that suggested to the Queen her strange hobby.