

## FARM AND GARDEN NOTES.

### ITEMS OF INTEREST ON AGRICULTURAL TOPICS.

**Crow Humus On Your Poor Land—Ducks and Geese Like Weeds—Important Point In a Calf's Training—Sows at Farrowing Time—Etc., Etc.**

**Grow Humus on Your Poor Land.**  
If your land is too poor to grow a crop of red clover, which is used to store up nitrogen in the land, try cow peas or crimson clover, or something else that can be used to plough under and will grow on poor land and thus add vegetable matter, or humus as it is called, to the soil. By doing this you will soon find that the land is steadily improving, and, indeed, some farmers who are doing it are securing an increased yield of crops year by year, and their land receives no fertilization whatever, not even manure.

**Ducks and Geese Like Weeds.**  
A weed can hardly be of any benefit except that it keeps the farmer bustling and thus makes him stir up the surface of the soil, which enables it to hold the moisture much better than if a crust was allowed to form upon the surface. Some of the weeds—such as plantain, purslane, ragweed and pigweed—are all what the ducks and geese would term a "delicacy." and if they were allowed to forage on such food they would in most cases leave grain for it and would be apt to clean up the spot infested with the weeds in such a manner that it would not be liable to trouble the farmer again for some time to come.

**Important Point in a Calf's Training.**  
One of the important things in raising a good calf is to train it to be led by the halter when it is small. It makes it much easier and more pleasant to handle it when it is grown. It is but a small task to train a calf if the work is begun in season, or a colt either, but if they are not haltered and led until they are two or three years old there will surely be trouble, possibly broken bones to mend, and not always the bones of the frightened and therefore refractory animal. If we were buying a cow we would willingly pay ten dollars more for one that has been learned to come when its name was called, and that we could lead home by the horn or by a halter than for one that was wild and unused to being handled. In fact, we would not take that sort of an animal as a gift now, for we are not as spry or as strong as we were forty years ago, and we have no desire to engage in a wrestling match with a wild animal.—American Cultivator.

**Sows at Farrowing Time.**  
The condition of sows at farrowing time is more essential than the care of the pigs. If a sow is in the right condition, she will have little trouble in farrowing and if she commences right the work is half done. Old and young sows should be wintered separately and fed largely upon shorts, with but little corn. It is better to warm the water and mix with the feed during very cold weather. Young sows should have full feed up to the time of farrowing, and not more than four ears of corn should be given each sow at a feeding during the coldest weather.  
If possible, stay with the sow when farrowing and give her a pail of water to drink. For the first two days give water with a handful of shorts, and for the balance of the week two handfuls of shorts at a feed. This will not unduly stimulate the milk flow until the young pigs are in a condition to take care of it, and will be the cause of saving many pigs that would later die of thumps. Move the young pigs out of their bed at twenty-four hours and see that they are moved about each day. Fat pigs are worthless and the youngsters must have exercise. Place a small trough near the pen to which the young pigs can have access, and when a month old begin to feed them a little milk and shorts. Remove them to a field as soon as the grass is large enough and wean them at two months old, when the males and females should be separated.—New England Homestead.

**A Partial Soiling System.**  
There has long been conflict between the advocates of the soiling system and the advocates of the pasturing system. Extreme views have been contended for on both sides of the question. Those in favor of soiling would have us adopt that system to the exclusion of everything else. Those that are extremists on pasturage would have us do nothing in the soiling line. The natural homes of these two theories are far apart: one is on the western shore of the North Sea and the other on the western plains of the United States. An exclusively soiling system pays in some cases on our great plains. Between these extremes of location part soiling and part pasturing will prove to be most profitable. Where land is high in price and labor not too expensive a partial soiling system should be adopted. It has been proved by trials carried on at some of our own experiment stations that four times as great a weight of grass can be raised on a meadow that is mowed as on the same meadow if it is used for pasturage. This is doubtless due to two facts: one, that the grass is being constantly trampled on when the meadow is being pastured and the ground packed hard, and the other is that the cutting off of the grass as fast as it grows decreases the total amount of root development. A decrease in size of the root means a

lessened ability to collect food for the plant. On the other hand the food that is collected by the root is eaten off in the root leaf and is not elaborated by the leaf and returned to increase the size of the root. When it is desired to carry a good many animals on a small area the soiling system should be used, at least in part.—Farm, Field and Fireside.

**Transplanting Onions.**  
When I first got onto the new wrinkle in raising onions I found that 2,000 plants were about all that a novice "as able to put into the ground in one day, and as we made the rows one foot apart and set the plants three inches apart, I calculated that to set the 175,000 plants on one acre would cost not less than \$50, even with cheap labor. But now that we have "the hang" of the transplanting business, and with the ground in as good order as it should be, we can set double that number with just as much ease, writes T. Greener, in the American Agriculturist. We now plant four inches in the rows and make the rows fourteen inches apart, and the work of planting an acre represents less than thirty days' labor. The point is to have the soil very fine and mellow so that the planting can be done with the fingers alone and without the use of a dibbler. The work then progresses very rapidly. Pick up a plant with the left hand and place the bulb part upon the ground a little to the right of where you wish the plant to stand. Then press the index finger of the right hand upon the bulb and push it down to its place. For a change you can take the middle finger of the right hand. At any rate it takes only one motion and the thing is done. With a little practice a nimble-fingered youngster will set 5,000 plants in ten hours. It is work and somewhat tedious and hard on back and knees and knee pads will come handy. For that reason I shall rejoice when we get a machine to set onion plants.

We find a very material difference in the cost of weeding in favor of the new method as against the older plan. This is especially the case later in the season and on land infested with purslane. It is almost impossible to keep this weed down in the heat of early fall. Onions grown on the new plan ripen up weeks ahead of those grown from seed. When the purslane begins to crowd us, we pull and market the onions, and for several years past we have sold these early, large bulbs at an average of eighty-five cents per bushel.

**Confining Fattening Cattle.**  
The common method of fattening cattle while they are roaming about on the pasture or range with other animals is about as unprofitable as can be, and yet many prefer this to confining them. Proper food of course is the first essential for fattening steers, but next to the right kind of food we have to consider its cost. The cost is naturally dependent upon the amount, and the more that the cattle which are being fattened for market roam about the greater quantity of food will they require to make a given weight. Not only this, but the animals are often annoyed by other cattle in the field, and the worry and fright might neutralize all the good obtained in one day's ration. In order that the food shall do the greatest amount of good, the cattle must have contented minds. It is only necessary to make the experiment to satisfy one of the justness of this claim. Two years ago I had ten steers which I was ready to fatten for market. They were about equal to each other in point of healthfulness and promise. To test the value of confining them during the fattening period, five were turned out to run wild in a pasture all summer, and the other five were confined in a stable with a yard attached where they could obtain all the exercise really needful. At first the confined cattle did not take kindly to their narrow quarters, but seemed restless and discontented. During the first week I believe they actually lost in weight, and I was almost prepared to say that it paid better to give fattening steers their freedom. Had I not persisted in the experiment I should have drawn improper conclusions, as I doubt not many others have done heretofore. But after the first week the confined animals became better accustomed to their quarters, and they contentedly chewed their food, rested a good deal, and became fat, sleek and lazy. Every pound of food then went to make fat, and it was astonishing to see how rapidly they increased in weight. It was evident within a fortnight that the tide had turned in favor of the confined cattle. In order to make them lay on the fat they did it was essential that they should be kept quiet and contented, and this can be done where the surroundings are pleasant, the food good, and nothing is allowed to frighten them. A little green and tempting food of an unusual nature should be given to them occasionally, and this will help to make them peaceful and satisfied. In feeding them they should be given just enough to make them fat and lazy, but not to clog up their systems. Then the fat-making process stops. At the end of two months the confined cattle had gained between fifteen and twenty-five pounds more than the five allowed to roam loose in the field, and as it cost no more to feed them the gain was all profit.—William Conway, in American Cultivator.

**Short and Useful Pointers.**  
Sunlight is a good disinfectant for a stable.  
As a rule, cattle are kept in too close quarters.  
Overfeeding is a waste; underfeeding is a sin.

If your hens are overfat don't expect many eggs.  
If the hens are to be profitable they must be kept scratching.  
A covered and cemented manure pit will save its cost every year.

The dry seasons are the ones that make new friends for sorghum.  
There can be no question as to the profit of a few hogs on every farm.  
If you possess a running stream of water, by all means cultivate some water-cress.

The only proper way to make old wheat land more productive is to rotate the crops.  
The barn in which stock is kept should have plenty of air and sunshine at all times.

In order to be successful sheep-breeding has got to be conducted on scientific principles.  
To insure success with young pigs a good shelter, and a yard to exercise in, must be provided.  
Always bear in mind that the cost of producing a pound of pork increases with the age of the pig.

This country has too many "scrub" milkers as well as "scrub" cows. It isn't always the fault of the cow.  
Land gets out of condition as well as the stock. The barnyard furnishes an excellent condition powder for such land.  
The female cattle tick is supposed to deposit between 3,000 and 6,000 eggs. And all this during the period of two months.

Cold storage facilities are on the increase in this country, and are, in a great many cases, being adopted on private farms.  
Stock can't stand being fed liberally one week and starved the next. Such up and downs as these do not agree with them.  
It is believed that sugar-beet pulp can be fed more advantageously to cattle and sheep than that being fattened than to dairy cows.

Good farming means the destruction of weeds—the burning of all rubbish and garbage, the removal of all crop remnants as soon as the crop is harvested, and having all things just where they belong.  
There were 500,000,000 fowls in the United States last year, and the number of eggs laid was estimated at about 1,450,000,000 dozen, or 17,400,000,000 eggs. The value of these fowls and their product is set down at \$420,000,000.

**What the Kaiser Can Do.**  
We are told that he has written a public prayer and conducted a choir. He can cook as well as he can eat. He can play chess, paint pictures, or draw caricatures. He has learned engineering and studied electricity. Though he has only the use of one arm he can shoot game for four hours at the rate of two a minute. He has over a hundred titles, and is an admiral in three of the biggest navies. In twenty-five years he has shot 23,000 head of game. He changes his dress a dozen times a day, has a dozen valets, and wardrobe worth \$500,000. He works every day from 5 A. M. to 7 P. M. He can write a song as well as he can sing it, can manage a yacht as well as he can ride a horse. He can conduct a religious service as well as a bishop. He is king, emperor, author, musician, dramatist, traveler, skier, conductor, sportsman, singer, and there is nothing, from rocking a cradle to ruling an empire, of which he is not a master. He is the royal jack-of-all-trades, with the pride of an emperor and the power of a Caesar. He is the modern William the Conqueror. Before he had been on the throne two years he had dismissed the foremost statesman on the continent of Europe.—London Young Man.

**Home of the Merry-in-Round.**  
In Schleswig, Holstein, after the spring sowing is finished, the farmers entertain their season of comparative leisure with all sorts of festivities.  
The favorite sport is jousting, or riding at a ring. On the island of Alsen there is an annual tournament lasting two days.  
The sons of the wealthier farmers are the contestants and the prizes are of considerable value. The jousts in the villages are less pretentious, but quite as satisfactory to the performers, who are for the most part farm laborers and stable boys. From a gaily festooned arch erected in the public square hangs an iron ring and one rider after another gallops under the arch and endeavors to impale the ring on a wooden lance resembling a billiard cue.  
He who carries off the ring the greatest number of times wins a modest prize and is furthermore crowned "king" or leader of the dance to be held in the evening.

**Origin of Camp Meetings.**  
In 1709 John and William Magee, brothers, the first a Methodist local preacher, the second a Presbyterian minister, started from their settlements in Tennessee to make a preaching tour into Kentucky. Such interest attended their work that at the next meeting many families encamped in the woods. The co-operation of these brothers was so pleasing an example of fraternity that the earliest camp meeting included members of every denomination.

Descendants of the missionaries in the Hawaiian Islands constitute about 1-20th of the white population, exclusive of the Portuguese.

## NEW RELIGION IN LUZON.

### It Says Its Votaries Need Not Work and It is Spreading Fast.

A new religion has been started in Luzon in the Philippines and some people think it will lead to trouble. Its main doctrine releases its followers from the necessity of working. The supreme being to whom prayers are directed will, it is declared, provide sustenance for all true believers. The religion is therefore attractive to the Filipino, who does not do any more work than is necessary to keep himself in rice, cigarettes and betel nut, anyway.  
A man named Gabini started the religion and its votaries are known as Gabinists. Gabini and several of his deacons, or chiefs, were quietly and informally shot by the Spanish authorities at Apalit. The new creed was not stamped out, however, for Gabini's chief clerk, Felipe Salvador, took it up. After doing a little service in the Filipino army Salvador now devotes himself to extending the faith. Wonderful stories go abroad concerning miracles Salvador has performed. Sick people are carried to him to be cured, and if they die under his treatment it is said they were not sincere in their faith.

The Gabinistic religion, as nearly as can be learned, is very simple. The people gather and pray long and earnestly to an invisible supreme being who is supposed to provide food to his faithful subjects in some miraculous manner, and to perform cures. The chief duty of the believer is to make at least one pilgrimage a year to the main shrine, which is located five miles above San Luis on a dry spot in the plain, or swamp, of Candaba. Here Salvador has had a church erected. It is an imposing affair of bamboo and alpa thatch, rudely furnished with a few seats.

Salvador styled himself "General" and by this title he has been called. It was at the suggestion of several people of the village of Balling that General Otis at last gave orders to have Salvador placed in custody. This happened two months ago. His church was not molested and neither were his services, which went on again after a slight interruption, a new general being installed in the person of Salvador's chief clerk. Salvador's arrest was due to a belief that as an insurgent leader he was simply inciting the people to fresh outbreaks. In addition to the church general there are several chiefs. It is the main duty of these chiefs to collect the fees which are regularly exacted from all believers.

At the present time the Gabinistic church is thriving wonderfully and growing every day.  
Planters complain that it is taking away their laborers. It is said the new church has now at least 10,000 members. The members seem to be little affected at the removal of Salvador, for they believe his body consists of two parts, one a material and one a spiritual part. The material part is of course confined in Manila, while the spiritual part returns to pray with the congregation at intervals.  
The sick people who are carried to the shrine on litters are expected to make a complete confession of their sins, whereupon they become cured. If the cure does not follow it is a sign the patient has not made full admission of his shortcomings and therefore cannot be forgiven.—New York Sun.

### Crime and the Experts.

A saturnalia of crime reigned, and the good king was much distraught. Calling together his wise men, he bade them speak frankly as to the causes of the public ills and without fear to suggest remedies.  
"The trouble, O king," replied the wise men, touching the ground with their foreheads, "arises from too keen a competition among the professional expert witnesses, whereby there has come to pass such a cutting of rates that even the poorest criminal need not despair of acquittal. We recommend a royal decree fixing such fees for expert testimony as shall place immunity from punishment beyond the reach of all save the wealthiest and most noted criminals."  
"Flat!" commanded the king, and thanked them for their good advice.  
This story illustrates how easy it was to accomplish almost anything by judicious legislation.—Detroit Journal.

### Anglegworms Five Feet Long.

Occasionally we see in our gardens anglegworms six inches long, or more, and we think they are unusually big fellows. But Madagascar sports an angle or earth worm five feet long. Australia has one which is named after Professor McCoy, and which is four feet long and as thick as one's finger. In Sardinia these worms grow to a length of two feet and a half. The old saying that never was any creature created without having a purpose and an excuse for living is exemplified by the work the anglegworm does in improving the soil. It eats the earth, and then deposits it in small mounds on the surface. The mounds of the Madagascar worm are from three and a half to five pounds in weight. If left undisturbed, in half a century these mounds would form a strata of fertilized earth three feet thick.

### Cool Dolings of a Powdermaker.

A man named Powdermaker and his associates recently applied to Congress for authority to dig up the streets of Washington and lay an underground system of pipes and conduits for the purpose of distributing cool air among the houses and offices of the city.

## SILK OF SPIDER'S WEB.

### Marvelous Product of Milked Spiders to Be Shown at Paris.

One of the most novel exhibits in the Colonial section of the Paris Exhibition is a complete set of bed hangings manufactured in Madagascar from the silk obtained from the halabe, an enormous spider that is found in great numbers in certain districts of the island. It was a missionary, Father Cambone, who was the first to conceive the idea that these insects might be made to replace the silk-worm. He succeeded without difficulty in obtaining a sufficient quantity of silk to be of practical use, but he did not pursue his efforts beyond the purely experimental stage. The matter has since been taken up by M. Nogue, the head of the Antananarivo Technical School. The results he has already achieved show that the production of spider silk should quickly become a highly important industry.

The chief problem to be solved was to find a practical process for extracting the silk from the female spiders. M. Nogue has invented a most ingenious appliance for this purpose. It should be said that the female halabe allows herself to be relieved of her silk store with exemplary docility, and this in spite of the fact that she is distinguished for her ferocity; her usual treatment of the males who pay her court is to eat them, and she feasts without compunction on weaker members of her own sex.  
M. Nogue's apparatus consists of a sort of stocks, arranged to pin down on their backs a dozen spiders. The spiders accept this imprisonment with resignation, and lie perfectly quiet while the silken thread issuing from their bodies is rapidly wound off on to a reel by means of a cleverly devised machine worked by hand. Each of the twelve spiders thus "milked" simultaneously yields from three to four hundred yards of silk. As soon as a spider has yielded up all its silk it is replaced by a fresh insect and the work of reeling off the thread thus goes on with very slight interruption. The spiders whose threads have been exhausted are set free and ten days afterward they are again ready to undergo the operation. The silk of these spiders, which is of the most extraordinary brilliant golden color, is much finer than that of the silk-worm, but its power of resistance is remarkable, and it can be woven without the least difficulty.

**Visited the Caves of Mokana.**  
Captain Cameron, on his journey through Urua, in 1872, heard of the cave dwellers in the districts of the headwaters of the Congo River, but in spite of all the efforts he made, was unable to discover them. News comes now from Brussels that Lieutenant Leon Cerckel, of the Congo State troops, succeeded in locating these caverns. According to a report published in Le Mouvement Geographique these caves are situated in the mountains and hills which surround the Valley of the Lufira, a tributary of the Lualaba. The Lufira falls down at Djuo over a rock some 120 feet high, whence it flows through a ravine of from 400 to 500 feet deep, surrounded by steep rocky mountains. In a distance of about ten miles from the Djuo Fall are the caves of Mokana. All the caves are situated in the rocks. Some of them are two miles and even more in length, and most of them are inhabited by savage tribes. Lieutenant Cerckel says that they are absolutely dark, but not humid, and that at least several thousand people dwell therein. The fires which burned within the caves caused a dense smoke, which made a close investigation impossible. Cerckel succeeded only in entering some of the caves after he had presented the chief of the tribe with large quantities of colored cotton prints and brass goods, and even then he was soon compelled to leave the district with his companions, as his life was threatened by the savages.

### New York City's Elevated Roads.

In 1871, the first section of the elevated system in New York City was constructed, but put in operation in the following year. In that year the number of passengers carried on all the surface and elevated railroads was 138,867,000. In 1882, the total had risen to 252,800,000; in 1892, to 453,200,000; while in 1899 it was still further increased to 528,228,437, and rapidly growing. These figures are for the old city of New York, now known as the boroughs of Manhattan and Bronx, and are for paying passengers only. In 1899 there were transferred passengers amounting to 159,569,822, not included in the above.

It is interesting to note in comparison that for 1898 the United States Interstate Commerce Commission reports that there were carried on all the steam railroads of the United States, from the Atlantic to the Pacific, from the St. Lawrence to the Rio Grande, passengers to the number of 501,066,681, or 5 per cent. less than the number carried by the New York city surface and elevated railroads alone.—Scribner's Magazine.

### The Transvaal and the World's Fair.

The visitors to the Paris Exposition will see some curious exhibits in connection with the South African exhibit, among them models of mines containing ore glittering with diamonds and gold.  
It is commonly supposed that diamonds and gold constitute the backbone of South Africa's mineral riches. As a matter of fact, nearly every mineral known to science and nearly every precious stone used by the jeweller are found in that country. In truth, South Africa is a mass of mineral from the Cape to the Zambesi River.  
In the Kimberley district and east to Bloemfontein, diamonds and natural iron abound. To the northwest of this district are the Witwatersrand gold fields. On the Vaal and Orange Rivers magnificent asbestos, some of it six feet long, can be had for the trouble of digging.

Silver exists in all parts of the country, but is mined only near Pretoria. Copper has been mined in Namaqualand since the seventeenth century, and recently fine deposits have been found in Mashonaland.  
Lead is found in conjunction with other metals in all parts. Zinc exists in the Malmadi district and antimony has been mined near Barberton. Tin is being mined at great profit in Swaziland, twenty-one pounds of the pure metal being taken from every ton of ore. Quicksilver has been discovered in the north of the Transvaal.  
Mica can be found in the Zoutpansburg district, between the Selati and Great Letaba Rivers. Salt is plentiful at Uitenhage, in the Cape Colony, at Cradock and near Bloemfontein. In Rhodesia sulphur is being mined and in Natal oil has just been discovered. Nitrate deposits have been located in the Doornberg Mountains.  
Besides diamonds, amethysts, beryls, garnets, sapphires, opals, olivines, topazes, carnelians, tourmalines, rubies and turquoises have been found.—Collier's Weekly.

### United States Transports.

There are thirty-nine transports on the service of the United States army, of which thirteen are chartered. The Thomas, Meade, Logan, Grant, Sherman, Sheridan and Sumner are considered the finest in the world, being thoroughly equipped with electrical appliances and all modern conveniences for the comfort of their passengers. They have an average carrying capacity of about sixteen hundred troops, with their baggage, equipments and supplies. These vessels are used for the transportation of troops to and from the Philippine Islands. Other transports owned by the government are the Buford, Burnside, Crook, Egbert, Hancock, Ingalls, Kilpatrick, Lawton, McClain, McPherson, Fort Stephens, Rawlins, Rosecrans, Sedgwick, Seward, Warren, Wright, Relief and Terry, which are used for the transportation of freight and animals, but have an average capacity for 1,000 troops and are well equipped. The Relief and Terry are hospital ships.