

FARM AND GARDEN NOTES.

NOTES OF INTEREST ON AGRICULTURAL TOPICS.

Gather First Run Sap—Tin Cans in the Garden—Exercise is Necessary for Cows—Look for the Oyster Shell Scale—Etc., Etc.

Gather the First Run of Sap.

As soon as sufficient sap has run, the gathering is commenced, for the quicker it can be converted into syrup after leaving the tree the better. It is just as possible to make choice sugar or syrup from old sap as it is to make fancy cheese from tainted milk. In order to remove all foreign substances the sap is strained three times before reaching the fire.—Ohio Experience.

Tin Cans in the Garden.

In early gardening old tin cans come very handy. They should be melted apart and held together by a string or cord fastening. Take a shallow box about six inches deep, and set as many cans in as possible, then fill each with rich soil. When time to plant, place the box in a warm place and plant the seeds in the cans. When it is time to transplant or set your house-grown plants in the garden, make holes in your beds to the depth of the cans. Place the cans in these holes and cut the string. Fill in around it with loose dirt, spread the can a little and slip it out over the plant without disturbing the roots. Plants set out in this way will not suffer from transplanting. The cans used one season can be laid away for the next.

Exercise Necessary for Cows.

According to an authority, the tubercle bacillus is generally taken into the animal system through inhalation and finds lodgment in the throat and lungs. A moderate amount of exercise will frequently cause such action of the lungs as to destroy the germ when, if allowed to remain quiet, even in a well-ventilated stable, the same germ would grow and develop and cause tuberculosis, because there was no impediment to its development. The cow will stand higher feeding with less danger to the mammary glands if reasonable exercise is given.

Look Out for the Oyster Shell Scale.

The oyster-shell scale has been very injurious in some orchards. All scales pass through great transformation from the egg to maturity, and there are often vast differences between the males and females. The oyster-shell scale can be discovered from others by its great length in proportion to its width. The minute eggs hatch into running larvae, which, if females, soon form scales under which they are permanently fixed. In this position they injure the trees by sucking the sap. The best remedy is spraying with kerosene emulsion about the last of May and again early in June.

Testing Seed Before Planting.

One thing the farmer and gardener should not neglect, is to thoroughly test all seed before planting. This should be done a month or so before planting time. A large shallow box filled with soil will be sufficient room for testing all the seed put in on the average farm. Select the seed promiscuously from the bulk, carefully counting each variety and taking note of it. Plant the seed the natural depth, and set the box in a warm place, under the kitchen stove being warm and out of the way. During the day the box should be set before a southern window so as to get the sun.

As soon as all the seed, or as many as will sprout, are up, count the plants and compare with the number of seed planted. If justified in concluding that the test has been fair in every way, the plants can be pulled up and destroyed and their room used in making tests of other seed.

By using this test box, much time and useless labor will be saved. If your seed is useless you will know it and purchase new and fertile seed. If only half the seed germinate you will know in what quantity to plant in order to have the plants the required thickness. It is but little trouble, and the inconvenience of having the box around in the way will be more than counterbalanced by the knowledge gained. Knowing exactly what to expect from the seed planted, will save time for the farmer and gardener when time is money to him.—Farm, Field and Fireside.

The Cow in Winter.

We have fed millet, hay and mangles with good results. Mangles should be grown more for stock than they are. They grow very large in a good season, and it is not much work to grow them. They should be planted in the spring, when the ground gets warm, in rows far enough apart so that they may be cultivated with a horse and cultivator, states a writer in The Epitomist. They should be dug in the fall before a hard freeze. If one makes a practice of growing roots for stock he should make a good outdoor cellar, or pit, to keep them in. He should also possess a good root cutter, for it is a good deal of work to cut roots with a knife. Milch cows, when fed mangles, will give more milk and make more butter than when they are only fed hay. As soon as cold storms begin to come the cows should be provided with a shelter, or there will be a shortage in their milk. This means a great loss of money, for it is a hard matter to restore the usual flow when there has been a shrinkage.

Cows should be milked regularly. Milking later than usual, or perhaps, skipping a milking entirely, will surely dry up cows, and as I mentioned before, it will be almost impossible to get them to give their usual quantity again. If one wishes to make cows profitable, he should use them with kindness, provide good shelter, good feed and plenty of water, have regular hours for milking and feeding, and the cow should be milked by the same person all the time. If the cows are good to start with, and these rules are followed, they will surely pay.

Difficult Churning.

A correspondent wishes to know why "the butter won't come." He has two Jersey cows, one fresh in May, the other in harvest time. He feeds good hay twice a day, fodder once a day, and a good ration of corn and oats chop twice a day. Keeps the cream in a warm place to ripen, puts it in the churn at the right temperature by the thermometer to insure success, but for the last two weeks can get no butter, after churning several hours there being nothing in the churn but froth.

The trouble is the cream is too viscid. There is a gummy product in it which imprisons air and makes bubbles, and also holds the butter globules so they are not impacted by the concussion. Most of this is doubtless due to the time the cows have been giving milk. If the milk were mixed with milk from fresh cows it would be thinner and churn easier. Settling the pans on the stove until the milk begins to erinkle on top, then putting it in a cool place for the cream to rise, is some times resorted to. Skimming off the cream and mixing it with warm water, thoroughly agitating it and letting the cream rise again takes out much of the glutinous material. Feeding bran instead of corn and oats has also helped such cases. Using a separator and removing the gummy product by force is of course the way where the dairy is large enough to warrant the expense, but in this case the other expedients must be tried. The difficulty will disappear when the cows are fresh again, and until then churning should be done at a higher temperature than the usual degree. This causes a poorer body of grain, but butter a little off in body is better than no butter. It may be necessary to churn several degrees warmer than with milk from fresh cows.—E. C. Bennett in American Agriculturist.

Varieties of Corn.

Though Indian corn is exclusively a native of this country, the wide region to which it is adapted has modified its characteristics so that there are many varieties. All of them probably originate in that curious product, the pop husk corn, in which each seed is enclosed in a pod. This variety, though it served a valuable purpose in preserving the single grains from destruction, until the proper time came for them to grow. In our Northern States, especially in New England, what is called Flint corn is earliest and succeeds best though both sweet corn and popcorn are grown to a considerable extent, and for corn fodder the Western or Southern Dent corn is preferred, because though late in ripening it yields more tons per acre than can be got of any of the early varieties. There is a wide spread popular belief that Dent corn having larger ears will yield more than the harder and early Flints. But it both are kept until spring the soft Dent variety does not look nearly so large as it did while moist. The census statistics prove that the largest yields of corn are found in some favored location near the northern limit of corn production, Vermont showing a larger yield per acre than any of the Southern States.

There is reason for this in the fact that there is more sunlight between March 21 and September 21 the farther north we go. Wherever there is a season warm enough to ripen corn the more concentrated the heat is the better will be the crop, and the higher the quality. All the hard-grained varieties of corn, such as the Flint and pop corn, originate in the north. These make a richer and better meal than the softer Dent varieties, and a meal that will keep with less difficulty without injury.

Continued inbreeding of corn, selecting the seed from stalks which bear two or more large ears, will greatly increase the productiveness of any variety. This is yearly practiced by many old farmers who leave part of the husk at the butt of the ear to braut it together. If hung in the smoke house or beside an open chimney, such corn will soon acquire a fine, nutty flavor that makes it much more palatable than corn taken from the crib. The squirrel, and also rats and mice, appreciate the best corn, and if put up where they can reach it they will eat out the germ or chit, leaving the bulk of the starchy portion, together with the bran or outer husk. This refuse corn, after the germ is taken out, is good for nothing except to make pork hog feed. Rats and mice soil the corn as they eat into it, but the squirrel leaves the poorer portion uneaten without leaving his excrement upon it. The germ contains gluten and more of the phosphates than can be found in any other part of the corn plant.—American Cultivator.

During the past season the visitor to Abbotsford, Scotland, numbers above 8,000, being nearly 1,000 more than last year.

A Liverpool physician has discovered the bacillus of pink-eye in horses.

THE KAFFIR TRIBESMEN.

SOUTH AFRICAN NATIVES MAGNIFICENT SPECIMENS OF HUMANITY.

In An Uncivilized State They Are Overgrown Children—The Zulu's Remarkable Skin—Kaffir Virtue and Morality—What "Cape Smoke" Is.

Statisticians assert that there are 1,151 distinctive tribes of natives in South Africa south of the Zambesi River. Most persons who have lived in that part of the world will cheerfully assert that this census is far below the truth—if dialects and racial differences count for aught. Rough guesses place the number of natives at from 2,000,000 to 10,000,000, but, as a matter of fact, no one knows even approximately their number. This lack of information is due to the roving propensities of the natives. Here to-day, there to-morrow, it would take a mightier hunter than even the famed Selous to hunt them all down.

The writer (Edgar Mels, formerly editor of the Johannesburg Daily News, and now contributing this and other South African articles to the Scientific American) has seen the South African native, commonly called Kaffir, in all his varying phases, in his wild state, semi-civilized and wholly so. He has seen the native at his best and at his worst—untainted by the touch of civilization and soiled by its proximity. And through it all the writer has believed, and perhaps always will, that the Kaffir, whether Zulu or Basuto or Bechuana or Swazie or Amatonga or Matabele or any other tribe, has good in him—and had too.

Summed up in a few words, the Kaffir, in his uncivilized state, is an overgrown child, with childish foibles and shortcomings. But let him learn the virtues of civilization, let him discover the evil there is in him, let him realize that there is a broad path leading to destruction—and you will find a fully civilized being, as capable in certain directions as is the white man.

It is a fact that where the Kaffir is permitted to dwell in primeval ignorance, with none to warn him against vices he knows nothing about, he remains a good Christian, even though he is ignorant of doctrinal disputes and the meaning of higher criticism. It is equally a fact that where he imbibes a little learning, especially a knowledge of English, he becomes all that is worst in a human being.

A study of the Kaffir is a study of the human being, and what is more he has been grossly and shamefully maltreated. Space prevents a recital of the wrongs of the native, so too a dissertation as to his idiosyncrasies and peculiarities. There is no blood taint in the Zulu nor consumption in the Matabele. Endowed with a superabundance of animal health and constitution untainted (in most cases) by civilization, the average Kaffir is a magnificent specimen of humanity. The skin of the Zulu is totally unlike that of a negro as we know him. The Zulu's outline is transparent—so much so that the red blood can be seen coursing beneath it. That is the Zulu's greatest pride. He will point to his skin to prove that he is a pure-bred Zulu—the real Ethiopian of the ancients. And it is so with the other tribes.

As to the morality of the Kaffir—that differs according to the tribe and its proximity to civilization. The Zulu is eminently virtuous. Infraction of the law of morality is punished by death. The culprits are placed on the ground with their respective heads resting upon a flat stone. On the other hand, the Hottentot, having been a close companion of the white man, is the most immoral and depraved human being perhaps in existence. The Matabeles are moral, so are the Basutos and the Mashonas. The Bechuanas are less so, and the Bushmen rank next to the despised Hottentots. That the latter are as bad as stated is evident when the Zulus will not work in the same mine with one nor sleep in the same room or graal.

Nearly all the tribes, save the Hottentots and Bushmen, are cleanly, the Zulus particularly so. The Zulu goes in bathing twice a day. He cleanses his teeth with milk at sunrise and again at sunset.

All the tribes, even those partially civilized, believe in ghosts and spirits. Many worship the spirits of the departed. Still others are fetish worshippers.

The most advanced tribe is the Basuto nation, in which there are 50,000 Christians, with 144 schools. Strict as are the laws against the indiscriminate selling of liquors to natives, they are yet able to obtain all they want. And when their supply of ordinary rum and whiskey runs short, they manufacture the notorious "Cape Smoke." This addiction to alcohol is the great curse of the Basutos, and, in fact, of every other tribe.

Cape smoke must be tasted to be appreciated—provided the person thus experimenting survives. For be it known that Cape Smoke consists of wood alcohol, red pepper and sulphuric acid. This terrible concoction is relished by the Kaffirs as no European drink is—they have not yet been civilized up to the level of the American "mixed drink."

But to return to the Basutos. For more than 100 years this tribe has been undergoing a process of forcible civilization. Good men and good women have sacrificed their lives to the noble cause.

Just before the present war began there was a gathering of Indunas, or native priests, near the Free State border. Thousands of "Christian" natives attended. Two oxen were

brought into a ring formed for the purpose. One of the animals was snow white, representing the British. The other, coal black, represented the Boers. With weird incantations and wild dances these Christianized Basutos skinned the poor oxen alive. The white ox succumbed after five hours of terrible agony; the black one lived for nearly a day and a night. The gods of the "Christian" Basutos had answered the oracle—the Boers would win.

The Kaffir is a stole. With him, what is is. I have seen a Zulu's toe crushed by a rock. Calmly he cut the injured member off, tied the wound up with a rag, and then as calmly resumed work. This stoicism it is that makes the Kaffir such a formidable foe.

The native does not know his own power—due to numerical superiority. Arm him with modern weapons and you build a Frankenstein, who will prove as terrible a conundrum as Mrs. Shelley's monster. For despite his schooling and Christianizing and civilizing, the Kaffir remains a Kaffir, unable to forget his wrongs, and held in leash only through fear of the white man's death-dealing weapons.

Basutoland, while nominally independent, is yet a British colony. It is governed by a high commissioner, who in turn is ruled by the governor of Cape Colony. The native chiefs adjudicate all disputes between natives, although an appeal can be taken to the magistrate's court, where cases between whites are tried. The revenues are derived from the Cape Colony contribution, the postoffice, native hut tax and the sale of licenses. Whites are not wanted in Basutoland and everything possible is done to keep them out. The land belongs to the natives, and the uncultivated soil is allotted to householders for grazing purposes. The chief allots fields to each householder, who cannot sell the land, but whose descendants get it on his death. Several times a year the chiefs of the nation hold a national assembly called the pitso. Here any native can freely express his opinion without fear. He can take refuge behind his status as a member of the Basuto parliament.

One peculiarity that will interest bachelors is that married men have a band drawn around their hair, while those still in single misery are without this emblem.—Chicago Times-Herald.

"The Course of True Love."

He is a pushing young lawyer and does considerable work for her wealthy father, who believes in Detroit and has many irons in the fire. The young people met, became very fond of each other and were engaged. But they quarrelled. Both are proud and reconciliation is in the future.

He called at the house a few days ago to see the old gentleman on business, of course. When the bell rang she happened to be passing the door and opened it.

"Ah! Miss Jones, I believe. Is your father at home?"

"He is not. Did you wish to see him personally?"

"Yes, miss," bluffed, "on very important personal business. Good day," and he turned abruptly.

"Beg pardon, sir; who shall I say called?"

He grunted and made no other answer. She forgot to "fizzle" her hair before going to a card party, and he rode clear around the street railway belt line before he noticed that he had passed his own office.—Detroit Free Press.

Antonio Maceo's Skull.

The Revista de Medicina y Cirugía de Havana publishes an "anthropological study," by Dr. Montoalvo, Dr. de la Torre and Dr. Montane, of the skull of the Cuban patriot, Antonio Maceo. The most noteworthy point is the existence of an interparietal, or, as it is sometimes termed, an "inca" bone, from the theory that it was universal among, and distinctive of, the old Peruvian race. This, however, was shown by Anouchine to be erroneous, for after examining many thousands of skulls in various museums he found the bone in only 0.8 per cent. in Peruvians, in 1.5 per cent. in negroes, and in 1.3 per cent. in Americans. Maceo was, of course, of mixed race. The general character of the cranium approximates to that of the white race and indicate a man of remarkable capacity. The rest of the skeleton inclines more to the negro type and shows that he must have been a man of herculean strength.—London Lancet.

To Have Baths in the Schools.

An experiment is soon to be tried by the Committee on Buildings of the Manhattan School Board. It consists of providing shower baths in the public schools, and is a scheme which Commissioner O'Brien has been pushing for some time. The experiment will be tried first in a few schools on the lower East Side, and the plan to be adopted, it is said, will be most effective, and yet cost a moderate amount.

Portions of the playgrounds will be curtailed off, and this space will serve for the dressing rooms and baths, which will be entirely of the needle-description. These, it is believed, give better sanitary effects than the ordinary showers. The city will furnish hot and cold water, but the children must bring their own towels.—New York Tribune.

Oats, barley and rye originated in the wild forms along the Mediterranean. The first noted species of wheat were brought from Persia.

NEGROES TAKE TO COCAINE.

The Evil Common Among the Roustabouts and Spreading Fast.

The troubles which the steamboat men have been having with their colored roustabouts have been increased by the spread of the cocaine habit among the negroes. When the cocaine habit found its way among the negroes it is impossible to say but it is now the favorite mode by which they seek forgetfulness. It is as yet confined to the city negroes, but some of the planters have expressed the hope that the use of the drug be broken up in New Orleans before it reaches the cotton plantations. Whiskey is bad enough, they say, but traffic in it can be controlled far more easily than the purchase and sale of cocaine tablets.

The tablets are composed of cocaine and phenacetine in about equal proportions. Some chemical genius discovered that phenacetine prolongs the effects of cocaine and as it is a much cheaper drug, it is used as an adulterant for the cocaine. When a negro roustabout has swallowed one of these tablets, he seeks the most secluded part of the boat upon which he has shipped, and, hiding himself among the cargo, lies down and enjoys the visions of rest that the drugs cause. The effect is very like that of opium, only far less violent, more a restful, sleepy feeling. For a little while the cocaine fiend is as happy as a mortal can be, and he will probably keep on swallowing tablets until the mate comes around and finds him slinking duty and dreaming among the cotton bales and administrators a strong and effective antidote with the hickory stick which is his badge of authority. This continues throughout the roustabout's voyage, as long as the box of cocaine tablets holds out. When the box has run out, he will play crap with the other "rousters" and buy more cocaine if he wins.

The evil has grown steadily of late, and a number of drug stores in the negro district do an immense business in cocaine. So large is the business that the average negro walks into a drug store and puts down a quarter or a half dollar without a word, and receives a box of cocaine tablets in return, the drug clerk knowing by intuition what he wants; or if the negro says anything it is likely to be only "Tabs."

The cocaine habit is most common among the river negroes, nearly all of whom are addicted to it. They take their cocaine in tablets. These are dissolved in a glass of whiskey, if whiskey is handy, but if not the tablet is swallowed. The city negroes, who use the drug less generally, take it in the form of crystals or powder, which is snuffed up the nose. The cocaine habit is fast driving out the morphine habit, which, however, never had much hold among the negroes; the cocaine can be taken so much more easily and when mixed with phenacetine is cheaper.—New York Sun.

Sympathy Between Birds.

In the Zoological Garden at Paris a notable occurrence took place the other day. Professor A. Minne-Edwards, the eminent naturalist, witnessed it, and made it the subject of an article which has just appeared in a French scientific journal. Two so-called sun birds have been for a good while inmates of the aviary in the garden. These birds are popularly known as Japanese nightingales, though they are not found in Japan, and their song in no way resembles that of the nightingale. They have red bills, orange breasts and yellow wings. Their home is in India and in China. The two birds in Paris fared comfortably until one day a gray cardinal got into their cage and at once picked a quarrel. One of the sun birds lost almost all its feathers and was grievously wounded.

The poor creature found itself crippled and unable to sit on the perch. Furthermore, its feathers being gone, it suffered greatly from cold. Marvelous now was the sympathy manifested by its companion. Every evening it gathered moss and hay, with which it made a warm bed for the invalid. Every night it perched beside the sufferer on the cold floor, its wings being spread out to warm its companion as much as possible. For several nights it played the part of a good Samaritan. All its efforts were unavailing, and the wounded bird died. Thereupon the other literally grieved to death. It refused to eat, and remained crouching in the cage until it had joined its companion.

The Sizes of Prunes.

Prunes are sold in three sizes. The largest size is called the thirty to forty. This means that thirty to forty of these prunes make a pound. The medium size is forty to fifty, and the small size fifty to sixty. The largest prunes are of course the most valuable. The average price the growers get for their prunes is three and three-fourths cents a pound. An orchard of 250 trees will give a grower an average profit of \$400 a year. An acre will grow about one hundred trees, planted with the proper distances between them. The trees bear the third year after planting, and live from ten to twenty years. French prunes pay the best.

The Oldest Postmaster.

Roswell Beardsley, of North Lansing, N. Y., lays claim to being the oldest postmaster in the service of the United States. He was appointed in 1828 under the Administration of John Quincy Adams, and his salary was then fixed at the munificent sum of \$12 a year. Since his appointment he has served continuously. He is ninety-one years old.

Shattered Diamonds.

"Under certain conditions, which are very rare and remarkable," said an old Jeweller last evening, "a diamond may be shattered to atoms by a smart, sudden blow. The stone seems to disintegrate and fly apart, as nearly as I can express it, and when the Kimberley gems first came into the market the Brazilian brokers claimed that they were especially subject to that kind of accident. For the time being the story had its effect on trade, but it was proven to be untrue and the incident is now forgotten. In the course of an experience of nearly forty years I have known of only two cases of diamonds being broken. One occurred many years ago, when I was working in a shop in the old Reid House in Chattanooga. A lady customer dropped a cluster brooch from the counter to the tiled floor, a distance of about three and a half feet. It struck squarely on the centre stone, which was broken into a number of small, irregular fragments. The diamond had weighed about two carats. The other instance took place here in New Orleans about six years ago. A St. Louis travelling man named Crawford had a solitaire weighing a carat and a half set in a ring. He was standing in the store, and while conversing about something made a sudden gesture and struck the stone against a metal fixture. It was split into small, jagged splinters, a number of which we found on top of the show case. The drummer himself was the most astonished man I ever saw. He had supposed diamonds were indestructible simply because they were hard."—New Orleans Times-Democrat.

Pearls of Great Price.

Five hundred and fifty thousand dollars was the price paid for the great Tavernier pearl. It was originally owned at Catifa, in Arabia, and M. Tavernier made the trip from Paris to the desert city of Arabia for the express purpose of purchasing the pearl about which so much had been said and written.

He went prepared to pay any price, from five thousand to five hundred thousand dollars. It was thought that he might succeed in closing the bargain for about one hundred and twenty thousand dollars, but this proved to be a great mistake.

Finally the bargain was closed at five hundred and fifty thousand dollars. Pearl connoisseurs declare that it is not only the largest, but also the most perfect gem of its kind known, being exactly two inches in length, oval and of spotless lustre.

Among the crown jewels of England there is a pearl over an inch long, and egg shaped, which cost the government not less than five hundred thousand dollars.

Educational Advantages of Pets.

In accepting the election to the Board of Directors of the Animal Rescue League of Boston, the Rev. Edward Everett Hale proposed that every schoolroom in Boston be supplied with pets, and recommended for the purpose cats, dogs and rabbits. He said that at least fifteen cats slept under his veranda every night, and emphasized the need of teaching children kindness to animals. Of fifty Sunday school children to whom he spoke recently he said only three owned cats, and only one a dog. He ascribed this condition to crowded tenement house living. It was his opinion that no philanthropist could do better than to establish a rabbit farm in connection with each public school.

It is not infrequent to find turtles and other pets that are easy to care for in the schoolrooms of this city. In Boston, however, it is said that frogs are frequently kept, being often raised from the first stage of their existence. One teacher took in a hen that was allowed to hatch her chickens before the pupils. In other rooms there are aquariums, birds and boxes with rabbits.

Intelligent Elephant Mother.

A most interesting incident is related of an elephant. A baby elephant had received a severe wound in its head, the pain of which rendered it so frantic and ungovernable that it was found impossible to persuade the animal to have the part dressed. Whenever anyone approached it ran off with fury and would suffer no person to come within several yards of it. The man who had charge of it at length hit upon a contrivance for securing it. By a few signs and words he made the mother know what was wanted. The sensible creature seized her young one with her trunk and held it firmly down, through groaning and agony, while the surgeon completely dressed the wound, and she continued to perform this service every day until the animal was perfectly recovered.

Physical Test for Railway Employees.

Physical examinations for employees at Union Pacific headquarters in Omaha, Neb., will soon be ordered. The system as proposed is that each employee, present or prospective, shall be examined by the chief surgeon as to his or her condition of health, of which a record will be preserved for use to determine the employee's physical condition for retention in service, or for promotion. The examination and registration fee for the health certificate is to be fixed at \$1.—Chicago Record.

Ephemeral, But Pleasing.
"Flatterers are our enemies."
"Oh, I don't know; flattery makes us feel good while it lasts."—Detroit Free Press.