

FARM AND GARDEN NOTES.

ITEMS OF TIMELY INTEREST TO THE FARMERS.

Oil on Trees Injurious—Facts Worth Remembering—Steer Fattening—Treatment of Clay Land.

PLANT STRAWBERRIES.
Strawberries are as easily raised as potatoes, and, oh, so much more delicious. We are astonished that more farmers do not raise them, but it seems some men can't think of anything but hogs and corn, and cattle. Why, dear readers, there are men that have made more money off of five acres of strawberries than you can make off of the best eighty acres in Nebraska. Think of it. One acre well cared for of the leading varieties of strawberries will produce from 300 to 700 bushels of strawberries—400 on the average—but figure it at the lowest, 300 bushels, or 9,000 quarts per acre, and at only six cents per quart would amount to \$576. There is not a town of 500 people in Nebraska but what will consume from one acre up to five acres of strawberries, which will sell at an average price of six cents per quart or more. We know of towns in Iowa that have but 5,000 inhabitants, yet there are grown yearly from thirty to forty acres around the town, and the growers are getting rich, too. It does not take a fortune either to start in the business. At the prices that some of these growers are offering plants one can plant an acre at a cost of \$15 to \$20. A poor man can start with one acre and grow up in the business. The next four to six weeks is the best time to plant strawberries. Farmers that live near towns or the city can do a good business if they would. This is a business that no one man can monopolize. You don't have to let the bulls and bears make the prices for you. You can make your own prices. Every farmer should plant from 100 to 300 plants. This will raise well a large family can use. Many people say, "Oh, they will soon overdo the business." Not so. Look at the poultry business. People said ten years ago that the business would be overdone. It does not look so now. We are personally acquainted with a man that ten years ago left the city to go into the fruit and poultry business. When he left the city he had just \$25, an old pig of a horse and spring wagon, a pair of willing hands, and a full determination to win, and to-day he owns twenty acres of valuable land near that city, and has a fine team and everything that is necessary to run his business, and says that he has hardly realized that we have been having hard times. The time is here when smaller farms will be the rule in Nebraska as elsewhere. A windmill and a strawberry bed should go together on every farm.—Nebraska Farmer.

dled the horse question a little better and had a few good ones to sell.—Western Agriculturist.

OIL ON TREES INJURIOUS.

Any kind of oil or grease applied to the bark of a tree is injurious, as it fills the pores of the bark and thus prevents the entrance of air, which is indispensable to the life of the bark. A thick lime wash is not hurtful, but helpful, as it tends to destroy all kinds of insects and mildew, and to kill the decayed bark that is to be removed as soon as possible. It also defends the tree against the lice that might otherwise infect the bark. If the lime wash is scented freely with carbolic acid, it will be a protection against mice and rabbits, as well as against the borers.—New York Times.

STEER FATTENING.

Well grown steers will probably consume about sixty pounds of ensilage each. With this they will take from fifteen to twenty pounds of grain. If the ensilage has very little corn upon it I would mix the grain, four parts corn, one part oats and one part bran by weight. The mangels may well be used in small quantities as an appetizer from time to time, and the steers should have access to some dry fodder, preferably the clover hay, though the corn fodder, clover and timothy may be alternated with good effect. Care should be taken to bring the steers up to their full feed gradually, so that their appetites will always be keen. They should have each day all they will eat up clean and no more.—The Silver Knight.

TREATMENT OF CLAY LAND.

The trouble with a tenacious clay is its stiffness, by which it is hard to work and will dry out quickly in dry weather. It is then apt to crack and form hard lumps that cannot be broken, and the most important thing in any soil is its mellowness, by which moisture is absorbed and held. This requisite condition is secured most cheaply and easily by plowing in a heavy crop of clover, by which the land becomes filled with organic matter that separates the particles, and thus removes its tenacity. If one has abundance of manure, this will have the same effect, but this is a rare thing, and to grow clover and turn it under will be an excellent substitute to manure. It is one objection to the use of fertilizers that the organic matter in the soil becomes exhausted, and then the soil gets so hard and solid as to be difficult of cultivation. Draining will not remove the difficulty unless the land is too full of water and has a retentive subsoil. Such land as this should have a short rotation of grain crops, and then be sown with grass and clover, whose roots will, in time, fill the soil and put it in good condition, which will remain, if too many grain crops are not taken before another grass seeding.—New York Times.

CHOPPING WOOD.

Chopping wood is an art. All woodmen agree that there is a "knack" or "sleight" about it. The man who leaves a "fox-eared" stump is a hacker and not a chopper. Usually there is very little that is commendable in the ways of woodmen. When they are careful, however, they should have the credit of it. It is quite the custom in the pine woods of southern New Jersey to leave seed trees, and, what is still more commendable, they leave the smooth bark (Pinus echinata) and not the rough bark pine (Pinus rigida). This is practicing forestry in a rude way. A few choppers burn the limbs after them—that is, they fall a strip of trees to the left, then the neighboring strip to the right, so that the tops and limbs form a windrow. If the wind is right they burn it, and in that way reduce the danger from fire in summer and destroy what may become a breeding place for pestiferous insects. A good chopper leaves the proper kind of a stump. If it is in pine there is no difference, since pine produces no copious growth of value, and the stump soon decays. If it is oak or chestnut it is an important matter. A good chopper cuts a tree close to the ground, and leaves a clean, sloping top to the stump. If the bark is not split and the cut is clean it will not rot, and the copious growth which follows will be healthier and in ten or fifteen years fit for fuel. There is no reason for using such large firewood. Although more tedious to cut in the woods, there is more of it in the same bulk, it is more easily handled, easier to cut and split on the woodpile, dries quicker and makes a quicker and hotter fire.—Armstrong's Voice.

FACTS WORTH REMEMBERING.

It is worth while for all farmers, everywhere, to remember that thorough culture is better than three mortgages on their farms.

That an offensive war against weeds is five times less expensive than a defensive one.

That good fences always pay better than lawsuits with neighbors.

That hay is a good deal cheaper made in the summer than bought in the winter.

That a horse who lays his ears back and looks lightning when anyone approaches him, is vicious. Don't buy him.

That educating children is money loaned at a hundred per cent.

That one evening spent at home in study is more profitable than ten in country taverns.

The original civil engineer was the mole. He anticipates danger by making several exits and entrances to his abode.

MANUFACTURE OF KEROSENE.

Crushed into a Whirl, the Oil Becomes of Lighter Color.

How many housekeepers as they fill their lamps with kerosene oil or their summer stoves with gasoline, have any idea how these oils are made? And yet a few miles from Chicago, at Whiting, Ind., is the largest oil refinery in the world.

Everybody knows that in its crude state the oil comes out of the earth, but it would be an utterly useless discovery were it not for brains and money used in the refining of the raw material. By use of the brains and money, however, not only the clear oil, but several other products are drawn from the crude material.

Naphtha, benzene, gasoline and kerosene, the last often called coal oil or illuminating oil, belong to the same family. The three first-named being lighter oils, do not require nearly so much handling to bring them to perfection as the kerosene. This, of course, is easy to believe, but when it is said that from the same crude oil, after all the lighter oils have been distilled out, wax is made so closely resembling the product of the bees as to deceive even an expert, and that it is used in chewing gum factories, candle factories, laundries, and even in candy factories, one is often met with a polite look of doubt or an incredulous shrug of the shoulders. Yet it is so. It is possible to go yet further and say that hundreds of homes in Chicago have been made comfortable in past winters by the refuse that adheres to the bottom and sides of the stills after even the wax has been pressed out. This refuse makes a good coke, is easily lighted and is warmer, cleaner and cheaper than coal. Hundreds of tons are removed from the stills daily before they are "charged" again, and hundreds of those who use this fuel do not know that it was once crude oil, dug in the Ohio fields and piped on to Whiting. The carbon used in electric lights is also made from this coke. Nothing is wasted.

As the most common the kerosene oil is perhaps the most interesting of the products. After leaving the crude still it appears again in the "sweetening stills," or in the "compound cylinders," which perform the same work as the sweetening stills, but is a newer invention and is patented by an outsider, who allows only forty in each refinery. The "sweeteners" form an important factor in the refining of Ohio oil. Owing to the "compound" before mentioned and the continuous friction of the immense wire brushes, which keep the oil in a mad whirl, it loses much of its bad odor. It is again vapored off, cooled in the condenser boxes and passed off into the "steam stills" for the next process.

In the steam stills it is treated just the same as in the two previous processes, with the addition of a washing by steam from perforated iron pipes passing through it. It is "vapored" off as before, and now one would suppose that it was ready for use. Not quite. The kerosene oil now passes into the agitator for the final process. The agitator is a funnel-shaped tank in which the oil is treated with acid, and beaten and blown about by a machine called a blower, and washed by torrents of water until it roars like the lake in a storm. Every particle of foreign matter is thus expelled. It is then pumped off into the storage tanks for shipping.—Chicago Tribune.

A Wheelman's Wild Leap.

A few nights ago the chains which held the Piedmont to the pier in San Francisco had been released with the customary clank, the deckhands had pushed up the apron attached to the pier and the boat's deck, the signal had been given for the wheels to revolve and already the paddles were churning the water under the boat into a resemblance to soapuds; the thrill of movement was already experienced and the people who habitually frequent the lower deck while crossing the bay were amusing themselves in customary fashion, smoking, gossiping and preparing to sniff the cool air as soon as the boat passed out beyond the piles and into the ship channel.

Suddenly there came into view a startling apparition. Down the wharf, clad in sweaters and bicycle gear, sped an impetuous wheelman straight for the fleeing boat. The spokes of his bicycle wheels were invisible. His feet went up and down with regularity and great speed. At once there was a feeling of apprehension on the ferry-boat, and warning shouts instinctively uttered. The scorching passed not hesitated. The boat was moving, but the bicycle easily outclassed it by many degrees as a racer. Just as the clear water was about to show between the edge of the apron and the deck of the ferry-boat, the bicyclist leaped from his bicycle with the speed of thought, seized the machine and boldly jumped toward the boat. He was cool as well as nervy, and his wheel was not permitted to strike the deck with a perceptible jar. Then the men breathed easier and women spectators laughed hysterically. The bold rider took a fearful chance.—San Francisco Call.

Day and Night on the Moon.

The day on the moon is a fortnight in length. During that period the temperature on the illuminated side probably rises to 220 degrees Fahrenheit. The night is, of course, of equal length, and during the period of darkness the heat probably radiates so freely that the temperature falls to 300 degrees below the zero of the Fahrenheit scale.

The bones of aged persons having more lime in them than those of young people, are therefore more brittle.

INCONCEIVABLY SWIFT FLIGHT.

The Virginia Plover Makes More Than Three Miles a Minute.

The distance covered by birds in a day's travel is a matter of great interest, but it has not been studied as it ought to be. We know, however, in a general way that under favoring circumstances geese and ducks cover from 300 miles up to 600 in a day of twenty-four hours. The hard-working insect eaters that travel by day probably average five or six miles. The gorgeous Baltimore oriole, being easily traced by both plumage and voice, has been noted all the way from Rodney, Miss., to Oak Point, Manitoba, a distance of 1,208 miles, and he covered it in forty-eight days—a speed of twenty-seven miles per day. A lot of other birds were lumped together, and an average of twenty-three miles a day obtained. But the observers were few. And then it may be that the birds flew a hundred miles in a night and then rested for three days thereafter. They averaged so many miles a day, but what was their actual speed a-wing? Gatke, a German observer, who has devoted fifty years to the study of birds in migration on the little island called Helligoland, concludes that the Virginia plover travels 225 miles per hour, and that the average altitude of migrants in fine weather is at least 10,000 feet. Will we ever learn about these things definitely?

That the time of a bird's arrival in the spring varies with the weather is known to all, but to this rule there are some marvellous exceptions. On May 18, 1887, a Wilson's blackcap warbler was seen in a certain bush by an observer, who took especial note of the fact because it was a new bird to him and for other reasons. It was seen at 1:30 P. M. A year later the observer happened to remember the fact, and went to the shrubbery to see if by chance a blackcap had arrived, and found one in the same bush at the same hour. And this happened again the third year. It doubtless just happened so, and yet the birds that start North late in the season, as the blackcap does, move with much greater regularity than the early travelers do.

That individuals remain behind while the main hosts of a tribe migrate is very well known. It is worth while noting, because it emphasizes the assertion that eccentric people are found among the birds as among men. And some travel far from accustomed haunts. The Swainson's hawk, from the Rocky Mountains, has been found in the Adirondacks, and the horned lark of the plains in Massachusetts. I should not be astonished to find an Idaho magpie hovering around the Capitol at Washington.

The reason why birds migrate has not been considered here, but the allotted space is already full. Many reasons are offered, of which the chief is homesickness—a longing for the old birthplace—but none is entirely satisfactory. Perhaps one must go back to the old days when palm trees grew in Siberia and monkeys ran wild on the Cape Horn archipelago to find the reason. It is a matter still under investigation, and it is, as was said, in the hope that some may be incited to join in the investigation that this and other wonders and mysteries of bird life have been related.

A Track that Talks.

Between the forty-nine and fifty-five mile posts on the Carolina Central Railroad there is a piece of track for a distance of nearly six miles that presents a singular condition that, so far amounts to an inexplicable mystery. All trains going and coming go to grinding and start a terrible squeaking when they get on this six miles of track. The noise comes from not only one car, but every locomotive, every coach, and every car of whatever kind sets up a grinding as if turning a curve. The noise is something like the screeching of an ox cart that has no grease on it, and it is made by every truck in a train. The track is perfectly straight, and as there is no curve at all, the cause of the grinding and squeaking has mystified the railroad people. Every effort has been made to ascertain the cause.

The locomotives have been examined, the coaches and cars have been scrutinized, every cross tie and every rail has been inspected, every joint has been looked at, and every foot of the track has been regauged, but no explanation could be found. The section master has almost crawled over the six miles on his knees in search of the cause. The roadmaster has tried his best to ferret out the matter, and the superintendent has been over the track and inspected it—all of them making repeated efforts time and again to find out what is the matter, but they have given it up as a bad job. They have not only not been able to discover the cause of the noise, but have been unable to discover any theory to explain it. It is one of the railroad mysteries of the age, and has been going on for twenty years. During that time the cross ties and rails have been replaced several times with new ones, but without effect. Who can explain the mystery?

Sparrow's Choice of Colors.

It has recently been discovered that sparrows have a particular dislike to certain colors, such as purple and blue. A correspondent in Nature states that some caged sparrows that he had would not touch their food if he put strips of blue paper upon it; that they manifested a discourteous dislike to ladies who came into the room wearing blue dresses, and that several of them were cured of the vice of pecking at a certain part of the wall they had access to by plastering a piece of blue paper over it. As sparrows are grain-consuming birds, here is a suggestion for farmers.

RACE OF MISSING LINKS.

Interesting Information About Some Curious Bushmen in South Africa.

Olive Schreiner, the clever authoress of "The Story of a South African Farm," gives some curious information in a magazine article about the strange little bushmen of South Africa, now nearly extinct.

Akin in race and speech to the dwarf races found in Central Africa, they are lighter in color. So small in size are they that an adult Bushman is not larger than an ordinary European child if eleven. They have tiny, wizened faces, the wool on their heads growing in little balls, with naked spaces between. They seem to resemble, we are further told, not so much a race of children as a race caught in the very act of evolving into human form—the missing link, in fact.

These small people had, it seems, no fixed social organization. Wandering about in hordes or as solitary individuals, without any settled habitation, they slept at night under the rocks or in wild dog holes, or they made themselves a curious little wall of loose bushes, raised up on the side from which the wind blew, and strangely like an animal's lair, and this they left again when morning broke. Their language is said to be so imperfect that the clear expression of even the very simplest ideas is difficult. They have no word for wife, for marriage, for nation. No member of the race has, in any known instance, been taught to read or write, or to grasp religious conceptions clearly, though great efforts have been made to instruct them.

Although in no known instance has a member of this people been truly civilized, yet they have "a curious strong sense of gratitude, and are not incapable of a powerful affection of a dog-like kind," as an incident which came under Miss Schreiner's own observation shows. She says:

"Some years ago we came in contact with a Bushboy who had been procured from his mother by a bottle of brandy, and who was carefully tended in the hope of civilizing and rearing him. He, however, contracted consumption. On the day of the death of his mistress, seeing what his state was, bade him lie down in the little box which was the only bed he could be induced to use. Half an hour after we discovered him in the yard cleaning the knives, with the struggle of death already in his face and the rattle in his throat. Asked why he had come, he shook his head, and said he could not allow his mistress to have her dinner with an unpolished knife. We took him back to his box and gave him a sugar stick. He curled himself up, gave a look of unutterable gratitude and affection to his mistress, gave one suck at his sugar stick, and died—like a small, wild animal—but one capable of profound gratitude and affection."

These people, Miss Schreiner adds, have now almost disappeared; a few herds in the northwest and solitary individuals hanging about the pale of civilization are all that is left of them.

Wood-Pulp Shoe-Heels.

One of the latest adaptations of the wood pulp industry is the manufacture in Haverhill, Mass., of shoe-heels from that material, white pine and other kinds being used for the purpose. In carrying out this art the plan as described consists in reducing the wood in the usual way in digesters, after which the pulp is put into a tank and mixed with the substances for imparting to heel-stock the necessary requirements, such as alcohol, litharge, tar, degrass and fish-glu, a thorough mixing of these with the pulp being followed by soaking the same in a tank for two so that the fibre may be permeated, when another application of materials occurs. The object at this stage is to harden the pulp somewhat, so that it can be rolled into thick sheets and handled, shellac and borax accomplishing this, the pulp then having the consistency of cement. At this point slackened lime is put in, and as this hardens when dry, the pulp must be rolled into sheets and cut into heels before the hardening takes place. The pulp is now drawn from the tank in sheets, it being just thick enough, there being specially arranged rollers and adjustments at the bottom of the tank for effecting this. A series of pressures through press rollers reduces the sheet to the right thickness, and the sheet is next placed quickly upon the bed of a cutter; the wheels are now started, and in a moment the platen falls, forcing a hundred or more cutters upon the sheet, each shaping out a heel.

Hawaiian Huckleberries.

Near the Volcanic Herries on the island of Hawaii are great thickets of the oleo, or Hawaiian huckleberry, says the Popular Science Monthly, which the natives consider sacred to Pele, the goddess who is supposed to preside over the famous crater of Kiluaea, and which, together with white pigs and chickens, are thrown by them into the boiling red lake during an eruption to appease the wrath of the aggressive deity and thus cause the rivers of lava to cease flowing on their destructive course.

These berries grow in clusters on low bushes right on the very brink of the brimstone beds, and are so numerous that a bushel may be easily gathered in half an hour. In appearance they somewhat resemble a cranberry, and the flavor is pleasantly suggestive of grapes.

Electric Energy from Coal.

A new process, by which it is claimed that electricity can be produced from the direct combustion of coal, is described in a scientific journal. It consists in blowing air through a bath of fused caustic soda, having a carbon anode and iron cathode whereby a very large current of low voltage is obtained.

THE JOKER'S BUDGET.

JESTS AND YARNS OF THE FUNNY MEN OF THE PRESS.

Loved and Lost—He Knew the Sex—A Boon to Art—Domestic Cruelty—To be on the Safe Side.

LOVED AND LOST.
"Did Mabel promise to marry her photographer lover?"
"No. She developed a negative."

HE KNEW THE SEX.
Bicks—My baby actually cried for the moon last evening.
Wicks—That's nothing. One of these days she'll be wanting the earth.

A BOON TO ART.
"They say crude oil is becoming exhausted."
"Good! Now we shall be spared the infliction of so many crude oil paintings."

DOMESTIC CRUELTY.
"So Mrs. Blaker has got a divorce?"
"Yes; she discovered that Mr. Blaker had been hiding his small change every night under a flower-pot in the back yard."

TO BE ON THE SAFE SIDE.
Lulu—You should get him to sign the pledge before you marry him.
Babs—Why, he doesn't drink!
Lulu—No, but he may be tempted to later.

REASONABLY SUPERSTITIOUS.
Wallace—Are you superstitious?
Ferry—Only reasonably so. If some men I know were to try to borrow \$18 of me on Friday I would refuse.

MATERIAL VS. TIME.
Gentleman—What is your hurry, Pat? Haven't you all day in which to finish the job?
Pat—Bogorra, O'm throyin' to finish me job before the paint gives out.

USES OF THE PHOTOGRAPH.
"Goodness, Maria! Was the photo?"
graph open during a cat fight?"
"No. I turned it on last night when you were sleeping. Perhaps you will believe now that you snore."

UNWELCOME.
Peddler—"Peg pardon, ma'am, but I am agent for Doctor Feeder's Spice Root Bitters, and I'm sure if the members of your family would try them they would soon have the finest appetites—"
Lady at door (severely)—"This, sir, is a boarding-house."

DIDN'T GO FAR ENOUGH.
"Oh, yes," sighed the anteater, "my neck is all right as far as it goes, but—" He gazed longingly at the giraffe, who deftly picked a coconut palm.

IRRESISTIBLY ATTRACTED.
"I thought Wibbles was such a good rider, and here he goes and smashes his wheel against a brewery wagon."
"That wasn't awkwardness. It was a case of fascination."

A GOLDEN RULE FOR ENGLISH.
Auntie: Do you find your lessons hard? Little Nephew: Some of them is; but spellin' and pronunciation is easy.
"They are?"
"Yes'm. All you has to do is to pronounce words the way they isn't spelled, and spell 'em some way they isn't pronounced."

GOOD CHANCE FOR A JOB.
Tramp—Kind ma'am, I hain't hed nuttin' 't eat for two weeks—
Woman at the door—Wait till I call my husband; he's a dime museum manager, and may give you a fasting job.

PERFECTLY WILLING.
"Do you think your mother would let you have another piece of cake, Willie?"
"Oh, yes, ma'am. She told me to be sure and get filled up while I had the chance."

A WISE BOY.
Helen (awed). "Oh, Tommy, aren't you awfully afraid of the bears they tell about up here?"
Tommy. "Now! I'm not afraid of the bears anybody tells about. I'm only afraid of the bears I see."

AN INDIGENT MAN.
Henry Peck—Does your wife scold you for coming home late?
"Rabbe—Not a bit of it."
Henry Peck—How do you manage it?
"Rabbe—I don't have any wife."

HIS BUSINESS.
Muggins—Is your son in business?
Buggins—He's a contractor.
Muggins—What line?
Buggins—Lebbs.

GROUND FOR DESIRE.
"Mosquitoes are hateful, aren't they?"
"Yes, I don't mind their eating me if they didn't keep up such an everlasting complaint about the way I taste."

HE MISSED IT.
"I suppose you did not see the lovely sunrise this morning?" said Mr. Earlybird to Mr. Nightowl.
"Of course not," was the latter's reply in a rebuking tone. "I was abed long before that. You should cultivate better hours, sir."

TRIALS OF THE ROAD.
"I have been informed that your first attempt at a long distance ride on your wheel turned out to be a highly dramatic affair."
"Very. I had to walk back."

IF THEY HAD KNOWN.
A man, whom the circumstances of traveling caused to sit in the same seat with a young lady who was unusually friendly to a stranger, said, as he was leaving the car.
"I thank you for a very pleasant chat, but I am afraid you would not have been so kind to me had you known I am a married man."

"You haven't any advantage of me," promptly responded the young lady: "I am an escaped lunatic."
And so, as it turned out, she really was.

A perilous feat was performed, not long since, by a bicyclist in Lyons, France. He rode his wheel over the coping stone of a house, fifty feet from the ground, in the presence of an immense crowd. The track is only two feet wide.