

FARM AND GARDEN NOTES.

NOTES OF INTEREST ON AGRICULTURAL TOPICS.

Feeding Green Oats—Burning Weeds—Unnecessary Fences—Time for Planting Peach Trees, etc., etc.

Feeding Green Oats.
Horses that are idle in the stable or that have only light work may be fed a few green oats without injury. But they should on no account be given to horses that have much work to do. Green oats will give a horse the scours more quickly than any other feed. The oat hull irritates the intestines at its best, and it therefore needs to be thoroughly dried out before being fed. If given it should have some old timothy or meadow grass hay fed with it.

Burning Weeds.
It is a mistake to let weeds go to seed in the garden or around the farm, under the impression that they can be destroyed if gathered in the fall and burned. In the first place, the job is apt to be forgotten until most of the weed seeds have been scattered. Even if a weed is burned, its seeds may not be destroyed unless a hot fire of brush is first made and the weed seeds are thrown on a mass of burning coals. If weeds are piled in heaps they burn slowly, and as the seed falls to the ground it is protected from burning by the strata of carbonic acid gas that is found at the bottom of all slow-burning fires.

Unnecessary Fences.
In every wooded country the first impulse of the farmer when he clears the land of timber is to make much use of it for rails and posts to fence the farm thoroughly. No doubt for those early times plenty of fences to divide the farm into small fields was a convenience. It enabled the farmer to pasture his stock without allowing old and young to herd together. There was more labor in plowing and cultivating these small fields, but so much of the work of weed killing was done by hand labor that this did not matter. That era rather than the present was when "The man with the hoe," as described in Mr. Markham's poem, would best apply to American farm workers. The great improvement in cultivating and harvesting machinery has enormously lessened the labor of the farmer. One of its best effects is doing away with all need for most of the fences that were formerly deemed essential to good farming.—The Cultivator.

Planting Peach Trees.
A peach tree planted in November or December will, by the ensuing spring, have formed sufficient new roots to give it a firm hold in the ground and will grow rapidly when active vegetation commences.
Trees can be transplanted as late as March, and in some seasons until the first of April. All trees, however, should be procured not later than December, and if not ready to plant then should be heeled in, that is the roots should be placed in a trench, allowing room to get in fine soil in all the interspaces between the roots, and then cover somewhat deeply with mellow soil. From this trench the trees can be taken a few at a time as needed for planting. While in the trench the cut roots will become calloused and ready to start and grow with vigor when planted.
After the young tree has been properly prepared it should be placed in the hole that has been fitted for its reception with the roots in their natural position, then fine rich soil should be firmly packed around the roots, so that every root may be in close contact with the soil. Do not forget to pack firmly.

The First Furrows.
The first furrows plowed in the field are of great importance. It is exceedingly difficult to do a good job with the plowing if the first furrows are run carelessly or incorrectly. When plowing an old field the old landmarks make it possible to run a fairly straight furrow without much care, provided the field has been correctly plowed in previous years. But it takes skill to run a straight furrow across a new field, with nothing to guide but objects on the further side.
The farmer should not send the boy or the green hired man to begin this work. If it is wrongly begun not the best plowman that follows can straighten it out so that the field will present a symmetrical appearance when the plowing is finished. Even when an experienced plowman a good deal of care will be necessary in running the first furrows. The plowman must look straight ahead and hold his team well in hand.
If the field be plowed in "lands," then it becomes necessary for the best plowman on the farm to take the matter in hand, for there will be a number of first furrows to run, in laying out the "lands." After the first furrows are run they must needs be followed as the patterns of all that are to follow. That these furrows may be straight and even is of enough importance to justify the plowman in setting up temporary landmarks on opposite sides of the field if he be not skillful enough to run the furrows perfectly straight without them.—Farm, Field and Fireside.

Fowls in Confinement.
For the benefit of those who may have fowls in confinement the following is instructive to those who may keep fowls upon a free range: Overfeeding and lice are the two causes of most disasters to poultry; poultrymen are to blame for all the many consequences that follow upon their heeds.

Poultry in confinement must be fed differently from those which have a free run of grass or woodland, in which latter they revel, hunting over all the leaves, and scratching away, around and under old logs for their favorite grubs and bugs.

If you have not made it a business to watch your hens and chicks carefully you do not realize what a large amount of grass and green food they will eat in a day, when it is at hand, and when they have not been overfed with grain or scraps, and this is not all, as hens need rough food or something that gives bulk as well as nutriment. Even though you feed the confined birds the same identical food they obtained for themselves on a good run it would not be the same, as they would still lack the exercise so necessary for their health, and, therefore, in confinement, the same food would be too much for them.

This is why successful raisers of poultry in confinement always throw the grain to their fowls in straw, thus compelling them to work for it. Also hanging a cabbage head just out of standing reach, so that they must jump for every pick at it. This is a good system, and exercise is necessary for their health, but if the food was composed more of nitrogenous elements and less of the carbonaceous (especially of the oils and fats), there would not be so much necessity for a constant training process, less overfat hens which stop laying and want to set, less sluggishness in the yards, and more fertility in eggs.

There are still people in this enlightened age who stuff their chickens, both old and young. Now, corn is useful in the poultry business, as lard or bacon is in the kitchen, but not as a regular diet. If you want to fatten poultry or warm them in cold snapping weather in winter or when a hen is poor and on that account not laying, and needs a little help, etc., corn is just the thing, and the yellower the better, but as a general diet it is about as bad a thing as you can give, especially when fowls are confined.

Handling Milk Scientifically.
Most creameries educate the dairymen who supply them up to a certain standard in handling milk and cream. A set of rules is applied, which, if repeatedly disobeyed, brings trouble to the dairymen. These rules are formulated upon the best known principles, and they should be kept and lived up to by farmers who make their own dairy butter on a small or large scale. They will, in the end, profit by them, for they all tend to the making of butter and cheese. It is the order of the day to improve dairy products, and the man who can produce gilt-edged milk, butter or cheese is sure to make a good profit.

The proper handling of milk, as demonstrated by practice and experiment all over, is to aerate it just as soon as possible after it is drawn from the cow, and then to cool or chill it. The reasons for these two processes are simple. The first removes from the milk certain animal odors and gases that taint all fresh milk. The sudden cooling checks the multiplication of injurious bacteria, which will in a short time increase so that the milk is in a fair way to sour in a brief space of time. The modern aerators and coolers perform both of these operations at once, but a farmer can imitate the work to a certain extent without them. The aeration simply means to expose the milk to the clear air by spraying it out in a thin stream. If one has a tub, and pours the milk out slowly from a height of several feet, he will accomplish what the aerators do. The chilling of the milk should follow immediately. Clean cans that have been scalded out with boiling hot water can be sunk into a tub of ice, and then by pouring the milk into them and closing the top tight with tin and flannel, the necessary low temperature will be obtained in a short time. Some farmers have simply sunk their cans in a brook or spring of cold water, burying the bottoms in a foot or two of cold gravel. Where one has no ice handy this method is a good substitute. By treating the milk in this way it will be sweeter, cleaner and purer, and at the same time it will be so freed from bacterial germs that it can be kept a day or two longer than milk treated in the ordinary way. If possible the milk should be cooled to a temperature of 50 degrees and kept so. It goes without saying that the utmost care is necessary to keep the cans and utensils perfectly clean, and that they must be scalded out with boiling water every time they are emptied and before new milk is put in them.—American Cultivator.

"The Callao Painter."
A curious phenomenon is observed at Callao, the principal port of Peru. Very frequently sailors awaken in the morning to find the woodwork and iron of the ships covered with a brownish moisture that looks like dew, and unless it is rubbed off immediately it will stain old paint permanently. It does not stick to new paint, and may be wiped off at any time within a few hours. This is called "the Callao painter," and the phenomenon has never been satisfactorily explained. Nor is it to be found in any other port in the world. One theory is that fumes of sulphuric acid or some other acid are forced up through the water from the bottom of the harbor during the night, and that seems to be reasonable, but no discolored dew is noticed on land, and when it is falling it is not perceptible to persons aboard the ship; nor does it affect the health of the sailors in any way. It simply adds to their labor and injures their morals because it compels them to do a lot of extra scrubbing and to buy a quantity of extra paint. It is especially trying to men-of-war, and they avoid Callao harbor for that reason.—Chicago Record.

THE COUNTRY OF THE BOERS

AN EVENTFUL HISTORY LESS THAN SIXTY YEARS IN LENGTH.

Founded in 1840, the South African Republic was Seized by England in 1877 and Won Freedom in a War Where the British Lost Every Battle.

The South African Republic, as the state of which President Kruger is at present the head is officially known, was founded in 1840 by a body of Boers from Natal on its annexation by the British Government. They were part of those who had trekked out of Cape Colony in 1835 to escape from under the British flag and found a free state of their own on the eastern slopes of the Drakensberg Mountains.

The independence of the Transvaal was recognized by the British Government in 1852. During the quarter of a century that followed the Boers were engaged in organizing the country and consolidating their power over the natives, with whom they were frequently in conflict. In a war with the Zulus in 1877 over a question of boundary they met with a partial defeat, which the British Government took advantage of, and sent Sir Theophilus Shepstone into the country with instructions to proclaim it English territory, in order, as was stated, to avert a general rising of the natives. Then followed the Zulu war, with the British disaster of Isandula and the victory of Ulundi, brought on by the British claiming for which he and the Boers had been fighting.

The protests of the Boers against the usurpation of the British Government were of no avail, and on December 16, 1880, at Heidelberg, the flag of the republic was once more hoisted, and steps were taken to expel the British troops in occupation of the country. This was an act of war, and the British military authorities began at once to prepare for emergencies. The first fighting took place at Bronckerspruit between a British infantry regiment, the Ninety-fourth, which was on a march to Pretoria, and the Boers. At a point on their route they were met by a Boer patrol, the commander of which warned the British officer in command of the regiment that his orders were to stop him at a certain spot in the road, which he indicated. The British officer naturally refused to take any notice of this threat, and continued his march, escorted by a body of mounted Boers, who kept a line parallel with the British troops at about 500 yards distance. When the British column arrived at the point that had been indicated by the Boer commander the Boers opened fire, and in less than half an hour nearly all the British officers and nearly half the men were killed or wounded and the rest made prisoners. Immediately the result of the first engagement was known the Boers all over the Transvaal rose, and by their patrols cut off and isolated all the British garrisons from communication with each other and the rest of the world. Being short of ammunition, the Boers were unable to act vigorously on the offensive and confined themselves to disputing the British advances from Natal by Laing's Nek.

The first attempt to open a way through to the relief of the beleaguered garrisons was made by Sir George Colley, who enjoyed a high reputation as a skilled and experienced officer. Moving up from Natal with 1,100 men and six guns, he arrived at Laing's Nek on January 21, 1881. Here he was met by a body of Boers, stated at 1,430 men, without artillery. The action opened with a bombardment of the Boer intrenchments at a distance of a mile and a half, so great was the respect inspired by the Boer sharpshooters. Meanwhile, disposing of his force in three formations, about one-half in reserve and the naval brigade with the rocket tubes and a portion of the Sixtieth Rifles in support, General Colley launched five companies of the Fifty-eighth Regiment with about a hundred cavalry to the assault of the Boer position, ignorant of the full strength of the force holding it. In a few minutes the cavalry were scattered and one-third of the infantry lay dead or wounded on the slope. The survivors retired in disorder and reformed behind the Sixtieth Rifles when the British force was drawn off undisturbed by the Boers. In this affair the Boers' loss was two men.

The Boers then followed up this victory by attacking General Colley's communications, which forced him once more to take the offensive. On February 8 he marched from his camp near the frontier with five companies of the Sixtieth Rifles, a small force of cavalry, and four guns to clear the road in his rear. A few miles from the camp he left a half company and two guns to guard the drifts of the Inzago River, then in flood, and about a mile and a half further on encountered a Boer patrol stated at 167 men. The Boers at once assumed the offensive. General Colley, with 300 men and two guns, taking up his position on a flat-topped hill. The Boers took cover all around the hill, keeping up until daylight, when they drew off without making an attempt to assault the British position. They had twelve men killed and fourteen one-half their men were put hors-de-combat. With the loss of nearly all his horses General Colley regained his camp after a desperate night's march with the remnant of his forces demoralized.

By this time reinforcements began to arrive and his force was strengthened by the addition of the Ninety-second Highlanders from India, after having taken part in the Afghan war. He at once resumed the offensive, but avoiding Laing's Nek on this occasion decided to try a turning operation by occupying the Majuba Mountain, which overhangs the pass on the southwest side. He made up his force with three companies of the Ninety-second Highlanders, two of the Fifty-eighth Regiment and two of the Sixtieth Rifles, with a naval contingent. By a night march on February 25, he reached the summit of the mountain, which, to all appearances, was impregnable. The top of Majuba is saucer shaped, with a perpendicular belt running around it broken by some gulleys through which access might be had from the slopes below. These slopes are steep and the upper parts screened from the view above. General Colley distributed his men around the edge of this position, but neglected to fortify it in any way, not believing the Boers would attempt to scale the heights. At first it looked as though he was justified in this belief, for the Boers had already begun to prepare for a retreat, seeing their flank threatened, when under some inspiration their leaders, Generals Joubert and Smidt, decided to try the effect of a direct assault. A part of the Boer force taking cover with their usual skill opened fire at long range, doing, however, comparatively little execution, owing to the British troops, after the experience at the Ingogo, taking care not to expose themselves to the Boer marksmanship. While the attention of the British was distracted by this firing and they were unable to put their heads over the edge of the summit without the very great risk of receiving a bullet, some 250 Boers, the official statement says 220, were creeping up the steep slope of the mountain. One of the Boer leaders, with a picked party of about sixty men, made for a small peak standing out on the edge of the mountain summit, which proved to be the key of the position. Arrival at this point he discovered a British picket quite unconscious of the proximity of the enemy. By a well-aimed volley the whole of the picket were laid low and the Boers seized the peak. By this manoeuvre the British were caught in flank and rear and fell back in confusion from the edge of the summit. Meantime other parties of Boers rushed up by another gap and completed the defeat of the British, who fled in panic, the ill-fated Sir George Colley putting an end to his own life. The British losses at Majuba were about half those holding the hill, while the Boer loss was six, of whom only one was killed.

The result of this memorable victory was that a treaty of peace between England and the Transvaal was signed on March 21, 1881. England recognizing the independence of the Transvaal. On February 27, 1884, a further convention was signed by which the British Government retained only the power of vetoing, during six months after their conclusion, any treaties between the Transvaal and any other country except the Orange Free State. It was expressly stated by Lord Derby that England gave up all pretensions to interfere in the internal affairs of the South African Republic. Swaziland was placed under the administration of the Transvaal Government in 1894, the Swazis remaining under the rule of their own chief and their other rights being guaranteed. Internal troubles, said by the Boers to have been instigated by outsiders, broke out among the Swazis in 1898, but were arranged without fighting through their conciliatory treatment by the Boer authorities.

The Single Screw Disappearing.
"A remarkable feature in connection with the construction of steam vessels on the Clyde," observed a prominent Scotch ship builder recently, "has been during the past two years the almost total disuse of the single screw and the paddle wheel as a means of propulsion for small or large vessels intended for ocean, harbor and river navigation. For high speed the single screw and the paddle have given way almost completely to the twin screw. The difficulty hitherto has been the draught of water available, the paddle requiring less water in which to work than the screw propeller, which must be completely immersed. But when it is remembered that in action the screw propeller is similar to a wheel revolving it will be understood that by increasing the revolutions it has been found possible to reduce the diameter and still get the same speed. A few years ago ninety revolutions was high; now 200 are exceeded in some vessels and over 400 have been reached in torpedo craft."—Washington Star.

Joke on a German Town.
The Burgomaster of Spandau, Germany, recently received a letter from San Francisco signed "Charles Wagner," who, claiming to be a native of the town, offered to leave a bequest of \$100,000 for the betterment of the pavement. The offer was accepted, but it now has been ascertained that no such person exists and that somebody has been playing a practical joke on the town.

In the Matter of Management.
"It is better to laugh than to cry," said the young girl, brightly.
"Not if you are trying to manage a husband," said the woman.—Indianapolis Journal.

A Bachelor's Opinion.
When a woman begins a discussion by agreeing with everything you say, there is a terrific storm brewing.—New York Press.

OUR YOUNG FOLKS.

A WARNING TO THE LAZY.

"You lazy, lazy Pussycats! Ever since your breakfast you haven't done a single thing but sit there in the sun! I've had to learn my letters—four of them this morning: D and E, and F and G—I know them every one."

"Do you know what will happen? You all will grow up stupid. Snowflake, Whitey, Puffball!—Remember what I say! You won't be anything but cats, who cannot read a letter; And when I take to writing books, you won't know what they say!" —(Christopher Valentine.)

AN UNSELFISH SNAIL.

A naturalist once tried to keep two snails in a little garden where there was not much to eat. One snail was strong and, for a snail, quite active. This one soon got over the wall into the next garden, where there was plenty of food for him of the sort he liked. The naturalist thought that he had deserted his companion, who was a sickly snail. But no! Next day the snail came back, over the garden wall, and evidently explained to his friend how much better it was on the other side, for by and by both snails started together and soon both disappeared over the wall.

CAT'S EYES USED AS TIMEPIECES.

It may be that some time you will find yourself in a place where there is no watch or clock. Should you be desirous of knowing the hour, or even the fraction of an hour, at that particular time you must look around and see if you can find a cat. Should puss be loitering in your neighborhood you can, if you are an expert in reading the language of her eyes, find out the time of day without the aid of those ticking inventions which have entered so largely into the regulation of our lives. If read aright there are no eyes more expressive than puss's. At midnight the pupil is very round and large and full. After that hour it begins to decrease in size and grows gradually narrower until noontime, when it reaches the smallest limit, being then nothing more than a fine dark streak across the eye. The meridian having been passed, the pupil reverses proceedings and begins to enlarge. Possessed of some knowledge of this mute language, you may be able, provided puss does not object to being interviewed, to get a pretty accurate idea of the time. Of course this rule applies out of doors only.

GERTIE'S VISIT.

"Come and see me, little girl," said Miss Pitcher to Gertie.
Miss Pitcher was calling on Gertie's mamma, who had lately moved into the pretty village.
"Yes'm," said Gertie, "I will."
She didn't forget her promise. She wanted to go next morning early.
"She's such a nice woman," she said; "and she's got a cherry tree, and the cherries are ripe. She said so."
"Oh, I wouldn't go to-day," said mamma. "It isn't polite to return a call so soon."

But in two or three days Gertie went, dressed in a new dress.
She knew Miss Pitcher's house. It was a little cottage at the foot of the street, with a cherry tree behind it. She opened the gate and went up the walk; but just as she was going to ring the bell, somebody called out, "Go 'way little girl! I don't like children."
"Oh, dear!" thought Gertie, "when she asked me to come!" And she stood still a minute on the door-step, with burning cheeks, tears springing to her eyes. She couldn't see anybody, though she looked; but there was an open window almost covered up with vines.

"Go 'way, little girl!" And this time Gertie knew the voice came from the window. She turned away.
"I don't care, she said, 'I won't come again if she asks me a hundred times!"

But before she reached the gate, the front door opened.
"Where are you going, dear?" asked Miss Pitcher; and her voice wasn't a bit like the other. What could it mean?
"You—told me to go away," said Gertie.

"Oh, no, dear! It must have been Polly, my parrot; she talks just like a woman," said Miss Pitcher. "Come right back. The cherries are just ripe enough."

Of course, Gertie went back. And it was Miss Pitcher's parrot that had spoken to her from the cage in the window—a big, gray parrot.
"She'll talk as plain as I can," said Miss Pitcher. "Sometimes I almost think she's human. I hope you and she will be good friends."

But Gertie didn't think they ever could be, because Polly didn't like children, you know, and had told her so. But with Miss Pitcher, the cherries, and dinner for two on the porch, it was a very nice visit after all.

A LEGEND OF THE KALMUCKS.

Long ago there lived in India seven brothers, all of whom were renowned sorcerers. Close to them resided two brothers, sons of a Chan, and the elder ones greatly desired that the sorcerers should teach him their art. For a certain sum they agreed to do so, and for seven long years they pretended to impart their knowledge to him, but they never at any time gave him the true key.
One day the younger son of the Chan paid a visit to the sorcerers, and while stealthily peeping through a keyhole he discovered the secret of their art and at once told it to his

brother. To test the matter, their elder son turned the younger son into a horse, and without knowing what he was about, gave him into the power of the sorcerers.

Angered because he had discovered their secret, the seven sorcerers, resolved to kill the horse, but the horse having the power to change his form at pleasure, assumed the form of a fish. The sorcerers then changed into seven mews, and hotly pursued the fish. Finding that the mews were about to catch him, the fish became a dove, whereupon the mews changed to hawks and chased the dove.

After a time the dove grew so weary that he could scarcely fly, and was about to fall into the clutches of his persecutors, when he came to a cave called "the rest-giver." This cave was the home of a mighty master, whose name was Nagarguna; and the dove flew to him, revealed his true nature, and begged for help.

In the meantime, the hawks had changed themselves into seven men clad in cotton, and, to aid the dove, Nagarguna slew them. Anxious to show his gratitude to Nagarguna for ridding him of his enemies, the dove changed to his real self, the younger son of the Chan, and offered to do anything in his power for the great master.

"If you mean what you say," said Nagarguna, "listen to me. In the cool shade of the vast burial ground lives Siddhi-Kur. Half of his body is of pure gold, half is of emerald; his head is mother-of-pearl, and he is gifted with supernatural powers. I want you to capture him and bring him to me; for with him I can do many wonderful things."
"I will go gladly," said the young man.

"Then follow closely my instructions," said Nagarguna. "or you will come to grief. When you reach the burial-ground, Siddhi-Kur will rise and climb a mango tree, here is my ax, called the 'white moon'; take it with you, and by your manner threaten to cut down the tree, and he will descend. Here, too, is a great bag for you to take along, and when you have captured Siddhi-Kur put him into it."

"Take this butter-cake for your food while away; it will never come to an end, no matter how much or how often you may eat of it. Last, and most important of all, let not a single word escape your lips while you are on your journey."
After many days of hard travel the young man reached the vast burial-ground, and succeeded in getting Siddhi-Kur into the great bag; then, with the burden over his shoulder, he started back to the home of Nagarguna.

He journeyed several days and had not spoken at all, when Siddhi-Kur became restless, and proposed that either he or his captor should tell a story to while away the hours. The young man did not answer, but the strange being in the bag talked away, and told such wonderful tales, one after another, that the youth at length forgot himself and gave speech to his thoughts.

Then Siddhi-Kur shouted:
"Ho! ho! you have forfeited your fortune, so nearly won. By not keeping a sharp watch over your tongue."

Then the great bag opened as if by magic and Siddhi-Kur escaped.
The moral that this legend points to that we should never let our feelings become master of that little member the tongue. Oftentimes it is more profitable to keep silence than to speak. In other words, "Speech is silver, silence is golden."

Tree's Sap Is Like Milk.

Among the botanical curiosities of Colombia is a singular tree known as "leche miel" by the people and as "lacmelles edulis" by the scientists. Its sap, when analyzed, contains almost the same properties as cow's milk and in almost the same proportions. During the spring of the year the sap of the milk tree is gathered by the natives as the people of New England gather the sap of the maple, and they not only drink it, but manufacture a creamy substance that resembles butter in its taste and properties. The fermented milk makes a drink that is very much like koumiss, which they preserve in gourds.

Another curiosity is a plant of the laurel family, botanically known as "mirica arguta," which yields a species of vegetable wax, and might be made a profitable article of commerce if it were cultivated. The wax is of greenish color and disagreeable odor, but when boiled and purified loses those objectionable qualities and becomes white. The natives use large quantities of it to make candles, and when refined it gives a clear, soft light. The wax is obtained by boiling the crushed fruit of the laurel in water. When the water cools the wax congeals on the top. A well-grown plant will furnish from fifteen to twenty pounds a year. The wax is also used in making soap.

An Intelligent Monkey.

In 1880 there was an exhibition in New York city a very large and intelligent hog-nose monkey. This animal was confined by itself, though there was a door between his cage and the one next to it. This door could be easily opened by the monkey, but a spring governed it in such a manner that it would close unless held open. The hog-nose was a sociable individual, and was very fond of visiting its neighbors. It could not bear, however, having the door closed on it, thus shutting it out from its own particular domicile, so it evolved the ingenious trick of choking the door with a pan whenever it went calling. It would open the door, then place the pan in such a position that it could not swing in.