

FOR FARMERS

Seasonable and Profitable Hints for the Busy Tillers of the Soil.

KEEPING MILK.

In a recent press bulletin issued by the Indiana experiment station, Prof. H. E. Van Norman states that milk sours because of the process of growth the multiplication of the bacteria the milk sugar is changed to lactic acid. When there is enough acid present to be apparent to the taste, the milk is said to be sour. Since the keeping quality of milk bears a direct relation to the bacteria which gain access, it is important to prevent their getting into the milk. The udder and adjacent parts of the body which are much shaken during milking is one of the chief sources of infection, while the dust of the stable, the hands and clothes of the milker, together with the pails and cans used are only slightly less important sources. Experiments show that rickling in a stable where the circulation of air can carry the dust out, wiping the udder with a damp cloth and scalding utensils with live steam or boiling water, will not only reduce the bacterial content of the milk, but increases the keeping quality of the milk materially. A covered milk pail, with only a small opening to milk into, reduced the number of germs falling into the pail, and the milk kept sweet 20 hours longer.

Immediate cooling after milking is next in importance. Milk allowed to stand two hours without cooling contained 23 times as many germs as when milking was finished, while that which was cooled to 54 degrees only had four times as many at the end of two hours. This emphasizes the importance of quick and thorough cooling.

Milk when first drawn has a peculiar flavor, or cowy taste, more or less noticeable, which if not driven off by aeration (exposure to the air) frequently gives the milk an unpleasant taste even before it becomes sour. Aeration may be accomplished by stirring or by pouring from one vessel to another. The can of milk may be set in a tub of water to cool. The cooling and aeration may be better and quicker done by running the milk over a combined cooler and aerator or other similar apparatus having provision for running cold water through it. Finally, cleaner cows, cleaner milkers, scalded utensils, quick and thorough cooling, aeration, less exposure to dust of street when delivering, will increase keeping quality of market milk. If properly done one delivery a day will be all that is necessary.

ENSILAGE.

It seems that none of our readers have had experience in making silage of anything but corn. Therefore the editor of Practical Farmer will have to tell what he has done. About 15 years ago, having a large second growth of clover, we concluded to put it in the silo, as the season was rainy and the prospect for curing it poor. We filled a large silo with the clover, running it through the cutter just as we did corn. It kept perfectly, but when opened for feeding it moulded very rapidly. Taking off the surface several inches daily, by the next day the whole surface would be white with mould again. The cows seemed to like it, and we could see no bad effects from it, but we did not care to use mouldy feed, and so turned most of it over to the hogs, which are supposed to digest anything. That same fall we sowed a large area in rye for cutting green in the spring. There was more of it than we could use in this way, and after it was headed and the grain in the dough we cut it into a silo and filled it about half full. Later on this same silo was finished with corn. When we began feeding in the fall this silo was the first one opened. The corn silage was excellent, and the cows enjoyed it greatly. Along in the winter we got down to the rye, and not a cow would eat it, and the whole was used for bedding purposes. These were the only instances in our personal experience in which we tested other crops than corn for ensilage making. We have seen ensilage made from cow peas, and while the cows ate it well, it was very sour and had smelling stuff, and we are not at all impressed with the value of cow peas as silage. The soy beans were also tried in the staffon silos, and they made a very good silage, which gave good results at the pail. But all the legumes are far better cured as hay, and there is no crop that can compete with Indian corn for the making of ensilage. When it is made from corn alone we know just what it is and what we must use to balance the ration, while if we have legumes or anything else mixed with the corn, we cannot tell anything about the ration. Sorghum has been used for ensilage making, but I would imagine that there could be no sourer silage made than would result from the use of sorghum for this purpose. Indian corn is the silo plant without a rival. Every now and then we read about planting cow peas among corn and the cutting of the whole for the silo. The man who tries this once on good soil will never be rash enough to try it a second time, for I cannot imagine a meaner job than the cut-

ting of such a tangled mass. We advise, then, the making of clean ensilage, and then use the other materials for balancing the ration, but not in the silo.

POULTRY.

There is one point upon which the best success in poultry keeping largely depends, in respect to which not enough is known of the best methods actually adopted by those who may be called professional adepts. It is so often forced upon the attention of those who take some pride in small successes in this field, and so little is learned that satisfies the amateur chicken raiser, that information as to the methods of the experts is earnestly desired for further enlightenment.

The crying want is, in a general way, a want of cleanliness. With say 50 fowls, confined during the joyful season of gardens and lawns to a house conveniently arranged with proper roosts and laying room, and a sufficiently large yard, fenced with wire netting, high enough to defy the most flighty of liberty-loving hens, what are the very best methods of insuring cleanliness? What is the daily habit of care which gives the most reliable protection against these three serious and obstinate evils: (1) Vermin, (2) foul odors, (3) scabby legs and feet?

The bright eye, plumage in fine feather, smooth, clean legs and feet, and neat quarters are also necessary to the comfort of the owner of poultry, and presumably to the feathered biped also, that an exact knowledge of the actual, practical system that secures them would doubtless be hailed and adopted with great satisfaction by many. Cannot we have a little symposium on this precise point, giving us the explicit rules of those who are most successful in this regard with fowls in close confinement?

As whatever affects health, comfort and high condition has an important bearing upon production, no doubt the highest cleanliness will also tell in a fuller egg basket.

TURKEYS.

As a rule, many young turkeys are killed by overfeeding. On large farms, it is not necessary to feed more than once a day where the turkeys have plenty of range. Young turkeys can live on insects and many little grasses which they relish. During the berry season, especially when wild strawberries are ripe, it is a pleasure to watch the little turkeys pick and eat them.

In seasons when there is a good crop of grasshoppers the turkeys will live almost entirely on them. When young turkeys have to be fed, the best food we know of is stale bread, but be sure the bread is not sour; by stale bread we mean any kind of bread three or four days old. It is well to moisten this bread with sweet milk; clabbered milk is also good for the young turkeys. Put it in a pan on the ground where they can get at it easily. During the warmest weather of summer it is important to keep turkeys hungry, for if you do not there is great danger of their having bowel trouble.

Food necessary to keep turkeys in good health is ground charcoal, but be sure not to have it ground fine, as turkeys will eat it better when it is very coarse. On a farm they can ordinarily find all the grit that it is necessary for them to have, but the eggs will hatch better if the turkeys have oyster shells. These also need to be ground very coarsely.

WATER FOR HOGS.

Very few farmers realize the importance of giving hogs all the pure water they require at all times. In many places they are watered once or twice a day. The lots and pastures should be so arranged that the hogs can get to the water in trough whenever they desire it. This is especially important during the hot days of early spring as well as the excessively hot weather in July and August. Hogs will not do well without plenty of water.

TRANSLATION ERRORS.

Some amusing errors are made by translators. An Italian paper turned Kipling's "Absent-Minded Beggar" into a "Distracted Mendicant." Another Italian editor, who translated a passage from an English paper about a man who had killed his wife with a poker, added an ingenious footnote to say: "We do not know with certainty whether this thing 'poker' be a domestic or surgical instrument." The desperate expedient of the French translator of Cooper's "Spy," who had to explain how a horse could be hitched "to a locust," is worth recalling. He had never heard of locust trees, and rendered the word by "sauterelle," or grasshopper. Feeling that this needed some explanation, he appended a footnote explaining that grasshoppers grew to a gigantic size in the United States, and that it was the custom to place a stuffed specimen at the door of every mansion for the convenience of visitors, who hitched their horses to it.

Her Irate Parent (to youth who has tarried late of an evening—"Young man, do you know that it is past eleven o'clock?" The Tarrying Youth—"Yes, sir. But she has been sitting on my hat for the past two hours, and I didn't want to tell her." Irate Parent—"Then hereafter don't keep your hat on your lap. Hang it up on the peg in the hall."

HOME OF BRITAIN'S KINGS

BUCKINGHAM PALACE AND ITS SURROUNDINGS.

The Centre of British History for Centuries—Story of St. James's Park.

It has occurred to the writer to give a short account of Buckingham Palace and its surroundings, for, though both are familiar to many, few know anything of their history, says a writer in London Truth. This is the more curious as St. James's Park was for 250 years the centre of the social, political and literary life of the nation.

Some time before the Conquest certain charitable citizens purchased the ground upon which St. James's Palace now stands. They there built a hospital for the use of fourteen leper women, endowed the charity, and dedicated the property to St. James. The ground in the immediate neighborhood—including the 155 acres now occupied by St. James's Park, and the Green Park—was marsh and meadow land, and it remained in its unreclaimed state with little alteration for over four hundred years.

In 1532 Henry VIII. obtained by exchange the Hospital of St. James's, drove out the leper women—or their equivalents—built a palace on the site, and purchasing the meadows and marshes which have been mentioned, reserved them for the use of the court as royal parks.

Both in France and in England it became the fashion in 1600 to breed silk worms for the purpose of manufacturing silk. James I. planted four acres of St. James's Park with mulberry trees in 1609 for the use of those worms, and in 1629, Lord George Goring was appointed Keeper of the Mulberry Gardens. On part of this land Lord George built himself a house, which he named Goring House; that is the origin of BUCKINGHAM PALACE.

In 1666 the Lord Arlington, who was a member of the Cabal Administration, hired Goring House, and renamed it Arlington House. He it was who, in that year, first brought tea to England, and it is probable, therefore, that the first cup of tea drunk in this country was brewed where Buckingham Palace now stands.

Sheffield, Duke of Buckingham, purchased the property in 1698, and built a new house in place of the old one in 1703, which he named Buckingham House. The situation was excellent. From the gates spread the Mall, where the world of London lived the greater part of the day and much of the night, and at the back there was country as far as the eye could reach. As the Duke wrote:

It is my delight to be Both in town and countree.

George III. bought Buckingham Palace in 1761, for £21,000, annexed several acres of St. James's Park to add to the grounds, and in 1775 settled the property on Queen Charlotte, when the palace became known as "the Queen's House." It was here that the King—advised by Dr. Johnson—collected the great library which is now one of the chief treasures of the British Museum.

In 1825, Nash and Blore built the present barrack-like palace which the late Queen was the first sovereign to inhabit, and to which Her Majesty removed from Kensington Palace within a month.

AFTER HER SUCCESSION.

But St. James's Park has the most interesting history of any spot in England: Charles I. led through the Mall to execution; Cromwell asking the opinion of his friends as to his assuming the title of King; Milton; Charles II. playing at "Pall Mall" under the shade of the elms and the limes, feeding his ducks in the canal, followed by his favorites and his dogs; Lady Castlemaine, La Belle Stewart, Nell Gwyn, the Duchess of Cleveland, St. Evremont, Grammont, Evelyn, Pepys, Dryden, Queen Anne and the Marlboroughs, the beautiful Duchesses of Ormonde and of Bridgewater, Lady Sunderland, Belle Dunch, Lady Mary Wortley Montagu, Addison, Fielding, Steele, Swift, Richardson, St. John Lord Bolingbroke—who, statesman though he was, once figured in the nude in a drunken freak in the park—Queen Caroline and her Marys, the beautiful Mary Bellenden, and Mary Lepel, "youth's youngest daughter"; Elia Lelia Chudleigh, afterward Duchess of Kingston, who walked in the Mall with scarcely any clothing on; Horace Walpole; the two lovely Miss Gunnings—"those goddesses the Gunnings"—the beautiful Duchess of Devonshire, Duchess of Gordon; the Duchess of Rutland; Gainsborough, Reynolds, Goldsmith, Johnson; the Countess de Genlis; Lady Anna Waldegrave, and Miss Keppel; Mme. Roland, and the Princesse de Lamballe—two prominent victims of the French Revolution—and Mrs. Fitzherbert. Hundreds of the most famous names in British history are identified with the four long avenues which stretch from Buckingham Palace to Spring Gardens, for it was in this park that the London world of those days lived—the world from every quarter of the town, since easy-going Charles II. opened the parks to the public.

AT THE RESTORATION.

It was in St. James's Park that high and low walked, flirted, dined,

and danced, but seldom fought, for it was a criminal offence to strike a blow in the Royal Park.

And the park is little changed since those brilliant days. Rosamond's Pond has been filled in; the menagerie and the cages in Birdcage walk have disappeared; Duck Island, over which St. Evremont was appointed guardian by Charles II., has been obliterated; the statue of the gladiator which stood by the parade at the east end of the canal, has been removed to Windsor Castle; the canal has been turned into an ornamental water, according to more modern taste; and the deer have gone. But the general plan of the park is the same as it has been for hundreds of years. The four long avenues, which were formerly thronged with life by day and by night, remain much as they were; some of the trees which formed the Jacobites' walk still stand; the Parade is still used by the Horse Guards; St. James's Palace, its gardens, and the gardens of Marlborough House exist; and a cow lingers yet at Spring Gardens. Not one of the many celebrated men or women I have named could fail to recognize the park they loved so well; nor could they lose their way, for all the principal features are as they were in the times in which they lived.

FLOGGED INTO SPELLING.

The master of an elementary school sent a circular to the parents of some of the pupils under his charge stating that judicious corporal punishment often had a beneficial effect on backward boys, and asking if they would approve of such a course when he considered it necessary.

The following is one of the replies he got:

"Dear sir,—I hav resoved ur floggin sirker, and u hav my sankshun too wolk my sun Jhon ass much as u like. i no Jhon is a bad skoler, his spaleng is simply atroshe. i hav tried to tech him mysilf, but he wil not lern nothing, so i hop u wil get it intow him as much ass u kan. "F. S.—The resin Jhon is sich a bad skoler is bekas he is my sun by my wife's first husband."

THE MIND TALKS TO MIND

WIRELESS TELEGRAPHY WITH OUT ELECTRICITY.

Wonderful Experiments Made at Washington—Messages Sent 200 Miles.

Members of the Society of Psychical Research are experimenting at Washington, D.C., with wireless telegraphy apparatus, giving results far more phenomenal than any obtained by Marconi and his imitators. These scientists are transmitting and receiving messages over wide areas of territory, and the percentage of error is claimed to be less than that encountered by the Italian inventor during his elementary trials. They employ transmitting instruments wrought of metal and wood. They dispatch single letters, words or geometric designs. A great economy in their system is realized from the utter substitution of concentrated mind force for electricity.

Chimerical as this enterprise may appear to the uninitiated, it yet bears with the prediction of that hard-shelled scientist, Sir William Crookes, prince of British chemists, fellow of the Royal Society, discoverer of thallium, inventor of the radiometer and X ray tube and former president of the Society for Psychic Research. Sir William in a recent interview prophesied that it would soon be found practicable to telegraph without wires by simply transferring thought from mind to mind, at the

WILL OF THE THINKER.

The transmitting instruments used in these experiments consist of a stereoptical lantern for projecting lights, an easel supporting a blackboard or screen, disks of pasteboard marked with the letters, words or designs to be despatched, and a conical tube to be held at the eye of the transmitting agent.

The black screen is set up in a dark room, and the disks, in turn, are attached to its centre. The disks are about a foot in diameter, are of white cardboard, and are impressed with the letters or figures of conspicuous size, printed in black.

The stereopticon projects a circle of intense white light which exactly fits the round outline of the disk and brilliantly illuminates the latter, which thus becomes the only visible object in the darkened room. The transmitting agent sits at a convenient distance from the illuminated disk and holds to his eye the conical tube which shuts from view any environmental objects or objects which may chance to receive reflected light from the white cardboard. The transmitting agent faces the disk squarely in order that the light on it will be reflected into the tube equally from all parts of the lighted surface.

All of this paraphernalia, as has already been surmised, is but a mechanical aid to perfect concentration and is the best possible conductor of the message from the black screen to the brain.

THE RECEIVER

comfortably sits or reclines in another dark room. His eyes are banded to shut out from his vision any intruding light rays which may be filtered through door or window cracks.

Quietude is essential to the success

of both agents. While the mind of the transmitter must be focussed and concentrated with all possible force upon the visible portion of the message to be sent, that of the receiver must be equally passive, assuming that vacuum which the hypnotist demands prior to his first operations.

Both transmitter and receiver keep conscientious record of the message dispatched and obtained. Unless he cause distraction, a second person in the room with each may more readily do this. The disks must, of course, be arranged without the receiver's knowledge of their content.

After concentrating his gaze upon the black and white image, then closing his eyes, walking into a lighted room and opening them, the transmitter sees in daylight the same figures clearly defined in reverse—the black being intensely white; the white of a kind of smoky whiteness. By gaslight the white appears bluish approaching purple, and the black a luminous yellow. These are the after images of the disk.

The receiver, on the other hand, while allowing his mind to remain passive, begins to see wavy clouds followed by a pale, bluish light, very bright in the center. As he becomes more and more skillful the figures transmitted gradually appear in larger luminous forms, lasting each a moment, but reappearing perhaps several times.

A SIMPLER EXPERIMENT.

adapted to any drawing room, may be conducted in this way:—The transmitter sits before a table, his chair back to back with that of the receiver. The latter occupies, preferably, an armchair. He faces a dark corner in the room and blindfolds his eyes, that his mind may not be distracted by objects about him.

The transmitter then, in the presence of others, perhaps draws from a pack of playing cards and concentrates upon the design, color and denomination of each produced. Beginners obtain more satisfactory results if experimenting with but two suits and two numbers in each suit. Many such packs may be arranged out of a dozen ordinary decks. However the cards may be arranged, they are shuffled and drawn at random.

The shuffling and holding may be done by a third person, who keeps record of the card he sees drawn each time, and that which the receiver claims to simultaneously see. In some experiments it is preferred to eliminate the court cards, using only the numbered denominations. Both receiver and transmitter frequently imagine that they see the forms of cards undergoing change while efforts are being made to picture them firmly in their minds.

The disk and stereopticon apparatus is successfully employed in transmitting colors as well as outlines, tinted screens being placed across the lantern. As progress is being made, the colors and designs are being combined as, for instance, in a red triangle, a blue square, a yellow circle, etc.

The receivers generally "visualize" the figures thus telegraphed. In other words, they perceive vivid pictures of them in their minds' eyes before pronouncing them. Others become more alert and mention them as soon as the thought has been transmitted. As greater and greater aptness is attained by some, common objects upon which the minds of the transmitters may fall are substituted for cards, figures or colors.

The distance between the two ends of the "telepathic line" seems sometimes to make a difference as to the powers of the experimenters, but as yet there can be deduced no rule as to why the "brain waves," as Sir William Crookes calls them, suffer, in some instances, a resistance from intermediate matter, while to others distance appears to be

NO FACTOR OF SUCCESS.

It has been noted in some long-distance tests that when one of the agents has forgotten his appointment the concentration on the part of the other has become so great as to cause a "mental pull-up," as it has been termed, bringing the forgetting agent to his senses.

In experiments where sentences have been dispatched over distances as great as 200 miles, not only the exact thought intended for transmission, but others incidentally occurring in the mind of the dispatcher have escaped to the receiver together with the intended message. Sentences thus transmitted have been received audibly, as if spoken in the room of the receiver.

Another class of experiments is made with a single receiver and a plurality of transmitters, all of the latter arranging themselves about a table and concentrating their minds upon some objects placed in the centre thereof.

In one experiment of this nature a small folding magnifying glass was produced, opened. The receiver said: "It is black. It is round. Transparent." The glass was then held to the light and the receiver said: "It is bright."

In other experiments with a plurality of transmitters bits of salt, sugar, vinegar, etc., have been simultaneously held in the mouths of the transmitters. It is claimed that the taste of salt has thus been made so vivid in the mind of the receiver that he has craved for water.

In 1871 Germany had eight cities only of over 100,000 people, now she has 33. The United States had in 1871 only 32 cities of 50,000 or over, and now has 78.