

ORCHARD and GARDEN

COWS AND THE MILK.

Dr. Huff makes some good recommendations to the Board of Health of Rome, New York, and among other things says:

Cows confined to the stable require a space of 300 square feet each to obtain sufficient oxygen to aerate the blood properly, but we usually see cattle huddled together in as close a space as possible, generally allowing each cow about 275 to 300 square feet, where they are compelled to breathe and rebreathe the contaminated atmosphere because the dairyman informs us he can get more milk from them if they are kept close together.

The majority of stables are built as cheaply as possible and are roughly finished inside and out, furnishing nooks and corners for dirt to locate and propagate disease. The floor frequently consists of 12-inch planks laid aside, just where the hind feet of the cows are placed and the milk stands when milking and a trench about a foot wide is behind the cows for the excrement to fall into. There is not one stable in a hundred that has any way of flushing and no great percentage has any system of drainage. There are stables that have stood for years upon the same ground and have contained hundreds of cows and all of the liquid manure made in them has been allowed to soak into the ground and there remain.

There has been so much said about milk containing germs of disease that it seems almost unnecessary to mention the fact, but we are so forcibly reminded that dirt and filth are the abiding places of disease and that cleanliness is the surest guide to health, that attention to it should not be disregarded.

FEEDING HORSES FOR MARKET.

Feeding merely to fatten may not make a better horse, but it is evidently a good way to make money out of horses. Horse buyers as a rule like the plump fat horse, and feeding makes such very marketable. The Illinois University Agricultural Station recently fed twenty draft horses to a fat finish. They cost on an average \$185 per head and when fat sold on the Chicago horse market for an average of \$238 each. They were fed forty-eight days and they gained in feeding \$2 a day. The horses were divided into three lots and were fed three periods of sixteen days each. Lot 1 was fed corn and clover hay, and lot 2 corn, oats and timothy hay. Lot 1 gained 194 pounds, lot 2 gained 277 pounds and lot 3, 142 pounds. Each lot ate the same amount of grain, but lot 3 ate more hay. Lots 1 and 2 at the end of the experiment were in prime condition, while lot 3 was not well finished. Each of the lots received in addition to their regular rations a small daily allowance of bran and oilmeal.

SHEEP AT LAMBING TIME.

It is obvious to those having experience in handling sheep that during the lambing period it is far better to divide the ewes into as small flocks as possible, as they can be manipulated much better and their young will be less in danger of being trampled under foot. In a large flock it frequently happens that young lambs are injured at feeding-time, when grain is given the ewes in the yard outside the paddock; for, in their anxious scramble to reach their feed, they take no thought of their young, but ruthlessly rush forward, crowding the little ones hither and thither. Particular pains should be taken to provide plenty of pure running water for the ewes, and it is also advisable to supply them often with salt. Everything should be quiet, wherever the sheep are at this period. The shepherd should move carefully among his flock, leading assistance here and there, ministering to the weak ones and exercising care and strategy in handling the timid young ewes, who are disposed to ignore their first born. Sheep are the most nervous and sensitive of farm animals. They quickly notice changes, and are easily disturbed by them. Therefore, great care should be taken to allow no dogs to come within sight or scent of the barns or pastures, or any unnecessary disturbance to occur. In handling sheep at lambing time, one's patience and perseverance are sometimes severely taxed. However, in the end, he who exercises both will succeed.—Weekly Witness.

WHAT TO DO WITH OLD SOWS.

A day or two at any of the big stock yards will show any one what farmers generally think of old sows. Just as soon as the pigs are weaned the sows are crowded, fattened up a little and sent on to market. We question whether the practice is a sound one. Not all sows are good mothers, in fact, not fifty per cent of them are. Keep a good mother just as long as she will raise a litter of seven or eight pigs. The question of the profit in keeping these sows hinges upon how they are cared for. These sows should be carried along as cheaply as possible, from the time their pigs are weaned until they are bred again. They will not need much grain feed during this time, but they should be kept in such condition as will insure their efficiency when farrowing time comes around again. Those who sell off their old sows every year say that all feed put into them simply goes towards maintenance, while with the same feed they can grow a thrifty young sow and have her weight 250 to 300 pounds

by the time she farrows.—Indiana Farmer.

POULTRY PASTURE.

It is distressing to see poultry confined to a bare yard. It is a very shortsighted way to manage. It is no more necessary to feed chickens all the stuff they eat than it is to feed cows in the stable the year round. Chickens like to forage for part of their living, and it is a great deal cheaper and a wonderful sight better to let them do it. You may not have a farm to let them range over, but you can provide a good sized yard and shut them out of part of it while green stuff is growing, then reverse the process. Vegetation induces moisture and helps to collect a supply of insects and worms that the chickens like to feed on. It supplies a mixed ration that is especially valuable to poultry.—Farm Press.

YOUNG TURKEYS.

Young turkeys are very tender things and much harder to raise to maturity than young chickens, but after they are a month old the danger line is past and they are henceforth harder than any chick. The main thing is to keep them perfectly dry and never allow them to get wet. They should be kept in till the dew is off the grass and never be allowed to be caught in a shower of rain. Cracked grains are better for them than sloppy food, and as they are greedy devourers of bugs, and insects, they should be provided with some kind of animal food when they can not get their natural supply of bugs.—Kansas Farmer.

THE SEX OF GUINEAS.

For the benefit of those puzzled to tell the sex of guinea fowls we quote the following from Coleman's Rural World:

"To distinguish between the male and female guineas note their gills. You will find the gills of the male are much larger than those of the female, and stick nearly straight out from his head and those of the hen are small and hang down. The hen is a good deal better than the male bird. If you are well enough acquainted with them you can distinguish them by their cry. The female says 'Pot luck' and the male chatters."

VALUE OF HAY.

The value of your hay depends upon its quality, and quality depends upon when you cut it and how well you put it up and store it. Black or musty hay shows careless work. The object should be to get the crop cured and in mow without the loss of any of the good qualities it had when standing as grass. Good hay is nothing but grass, with the water squeezed out.—Indiana Farmer.

PICKETT'S OLD FRIEND.

A Story Told of Abraham Lincoln's Visit to Richmond.

The day after the great fire following the fall of Richmond, Lincoln, with a small bodyguard, walked through the streets of the charred city. As he approached the corner occupied by Gen. Pickett's residence he directed the guard to wait, and to their astonishment ran two steps at a time up to the door and rapped. The servants had fled. The "baby bride" had never seen President Lincoln, but she had read his letters to her husband, and from him had learned to hold in the highest esteem the great Northern President. With her baby in her arms she opened the door, says The World To-day, and looked up at the tall, gaunt man with the sad face and uncouth ways.

Without a word of explanation he asked:

"Is George Pickett about?" To hear the husband's name bereft of its title by a Yankee at that moment was almost the limit, especially as many a rumor had floated about Richmond concerning the fate which awaited the leaders of the Confederacy.

With all the proud dignity she could command the baby bride replied:

"Gen. Pickett is not at home."

The stranger seemed disappointed, and as he turned to go remarked:

"I am Abraham Lincoln, an old friend of George's."

"Not President Lincoln!" Mrs. Pickett exclaimed. The tall man shook his head, repeating:

"No. Just Abraham Lincoln, George Pickett's old friend."

Following the instant prompting of the heart which still governs her, the baby bride thrust her baby boy into the arms of the gaunt Yankee, as her best effort to express her veneration and confidence, saying:

"I am George Pickett's wife, and this is George Pickett's baby."

Naval Opium Eaters.

The question of the use of opium in the army and navy continues to cause a good deal of anxiety to the French government. The evil is especially serious in the fleet. It is now twelve months since the Minister of Marine first took action in the matter, but the vicious habit persists and the Minister has felt compelled to at once declare war against it. The disciplinary measures ordered against those found to indulge in opium are now to be rendered more severe. Indeed, the duty of dealing with such cases is removed from all ordinary processes, and every man, of whatever grade, found under the influence of opium, is to be reported direct to the Minister of Marine. Every commander will be held personally responsible for neglect of the recent instructions within the sphere of his authority.—London Globe.

The county of London covers 75,442 acres, but the London police area is 443,421 acres.

PAUPERISM AND CRIME.

THE TWO COST THIS COUNTRY ANNUALLY SIX BILLION DOLLARS.

That is America's Record, and the Yearly Increase of Wealth is Only \$5,000,000,000, Dr. Charles J. Bushnell Points Out.

"This country spends \$6,000,000,000 annually on the criminal, pauper and vicious classes, and the annual increase of wealth is only \$5,000,000,000. Does not that look as if the public were bankrupt?" This statement was made in a lecture by Dr. Charles J. Bushnell, who in conducting a model public playground at Washington, D. C. He is a graduate of Heidelberg University and an authority on civic matters. Dr. Bushnell has the support of the leading citizens of Washington in his work. Dr. Bushnell's figures are taken, he says, from authoritative sources and represent years of careful study. He challenges any one to disprove their accuracy. He and his wife have made a special study of what they call the "social illness" of the United States. Continuing, Dr. Bushnell said:

"Why, the \$6,000,000,000 that this nation spends every year on its criminal cases equals the amount spent on all churches, public libraries, the Young Men's Christian Association, the Salvation Army, public hospitals, asylums for the insane and all benevolent institutions. The average factory hand earns \$440 a year, while it is estimated that the average criminal costs the public at least \$1,200 a year.

"Disease as a result of vicious habits is on the increase; suicides are increasing six times as fast as the population, and murders three times as fast; insanity is also increasing faster than the population. We are maiming and killing in accidents resulting from our industrial enterprises as many persons as were killed in an average of the civil war, the Philippine war and the Japanese-Russian war combined. In other words, we are practically carrying on these three wars all the time. And these deaths by accident, due to our fast commercial spirit, are from two to nine times as numerous as similar deaths in Europe, where experts have shown that three-quarters of such accidents are preventable. We are living entirely too fast.

"We have 40,000,000 paupers in the country, and 10,000,000 persons are on the ragged edge of pauperism."

Dr. Bushnell endeavored to show particularly the need of work to offset the growing evils of social conditions in the large cities. In 1790, he said, only 3 per cent of our population lived in cities of 8,000 or more inhabitants, while today over one-third live in cities of this class and in the east and northeast the percentage is much higher even than that.

"I believe," he said, "that more and more people will move to our large cities. This will be due to the availability of factory products and the smaller need of men on the farms, where work is being done more and more by machinery."

The public playground where children are given outings and useful occupation, is obviating to some extent these conditions. It was pointed out by Dr. Bushnell. While the facts he presented, he said, might lead one to take a very pessimistic view of the world's future, he nevertheless favored the utmost effort to turn the tide in the other direction, and he said he believed it could be done by herculean efforts.

ARTIFICIAL SILK IMPORTANT.

Its Production Relatively Recent, and at First Attended by Difficulties.

The industry of artificial silk is relatively recent, writes Hilary S. Bruno. It dates from 1844, when a French engineer, Count Henri de Chardonnet, took out the first patent, and at the Paris Exposition of 1889 the first results of this invention were seen.

The beginning was not such as to excite much enthusiasm, as (although the product obtained by the De Chardonnet process had all the appearance of natural silk) it was constituted by nitrocellulose, and consequently highly inflammable, thus rendering its applications very limited. In 1890 De Chardonnet modified this process by adding a special manipulation by which the cellulose was obtained in the pure state and unflammable. From that moment the industry of artificial silk was soundly established, and the profits of the commencement induced others to imitate and further perfect the process.

De Chardonnet employs pure cellulose as raw material, obtained from carded cotton preferably to that of wood, which contains a certain amount of mineral substance rendering the product friable. This carded cotton is treated by a mixture of nitric and sulphuric acids, becoming thus gun cotton, which in its turn is dissolved in a mixture of alcohol and ether to obtain collodion. The collodion is compressed into steel tubes possessing a resistance to pressure of 100 atmospheres, and having on their sides small glass tubes connected by a commanding cock. When this is opened the collodion escapes through an infinite number of the finest pinholes, dries almost immediately and presents the aspect and touch of natural silk. But this thread, constituted purely of gun cotton, is extremely inflammable. To render it as incombustible as natural silk, it is treated with a solution of alkaline sulphur or of ferrous salt. It is even more brilliant and takes the

dye more quickly. But it suffers from prolonged washing, a grave defect. Nevertheless, mixed with animal silk it is utilized in the manufacture of those stuffs which do not require washing, such as ribbons.

In 1900 Brenner patented another method of treating the cellulose. It consists in dissolving carded cotton in a cupre-ammoniacal liquor known as Schweitzer's solution and by passing the viscous liquid through the gage plate. The thread formed is treated by sulphuric acid, which dissolves the copper, neutralizes the ammonia, leaving behind pure cellulose.

The silk contained by the Brenner process presents some advantages over the preceding. It is cheaper, less dangerous to manipulate, and is less injured by water. It has only one drawback—it is less brilliant and consequently less attractive and less employed. There exists a third method, placed on the market quite recently, which seems to have a good future, as its application extends further than the ordinary limits of artificial silk. It is the process termed "viscose." Here the cellulose is dissolved in soda lye; the product obtained treated with sulphide of carbon becomes viscous, hence the name. This viscose, after having passed through the pinholes, is slightly heated, by which the cellulose is freed from the sulphide and alkaline matter. The thread of this process is more brilliant, more supple and more elastic than the De Chardonnet thread. Moreover, it is insoluble in water, and the cost price is only one-third of the De Chardonnet silk, \$1 per kilo (two and one-fifth pounds). This same viscose, when in the mass and decomposed by heat, can be converted into transparent and hard cellulose capable of being run into molds, and is there by a serious competitor of celluloid which is much dearer.

Artificial silk, in an industrial point of view, presents consequently a great deal of interest, and is claimed to be in every way equal to the natural product.—Pittsburg.

VICTORY FOR FRENCH WOMEN.

They Can Dispose of Their Own Earnings Hereafter.

What woman shall longer say that thirteen is unlucky when, after thirteen years of effort, the labor of women's champions has been crowned in France by a law giving married women the right to the fruits of their work? Do the mightier halves of the multitudinous menage exclaim disdainfully that they should have had it before, that it is only tardy justice?

What matter? They have this right now and did not have it before, and with the slow mental processes of men it required the ominous number of thirteen years to bring about that state of rationality wherein this act of simple justice could be done and this new milestone erected on the way to Utopia.

If it is money that makes the morgan, and the gray mare is the better horse, there are likely to be some pretty little skirmishes on the high road to progress in La Belle, France in the halcyon days to come.

Behold the role that women have played throughout French history; weigh their influence to-day. Let those who hail France to-day as the leader in beauty, in enterprise and airships enroll themselves at once beneath the petticoated banner and never again deny feminism.

For Frenchmen are ruled by women. Who doesn't know it? Who so quick as Frenchmen to recognize their masters? Who honors genius more? And now at last Frenchmen, who heretofore used women to save money for them or to give it to them in exchange for the right to say "hobby," have consented to permit those terribly able personages to dispose freely of all the money they can make by their own hands.

The new law, passed in the expiring breaths of the Chamber of Deputies, not only applies to future married women, but those already shackled in the sweet cords of matrimony may profit fully by its provisions and these may reap who have not sown. Wives may buy, may sell and may dispose of to their heirs property, real and personal, independently of their husbands, provided, always, the interests of the menage do not suffer. Frenchmen, who have so often declared that they have no word "home," place their household above women's rights still and preserve to the hubby one chance to check a wayward wife.

If rustling in the wings of her new liberty, she seems to her husband to be menacing the interests of the menage, he may apply to the courts to clip her sprouting feathers; otherwise a wife may have, hold and may dispense not only all her earnings, but all the increment thereon and all the profits of investment and the husband may sit down and twiddle his fingers. She is not even responsible for his debts unless they were contracted in the interest of the menage.

The family rights being thus secured by law, which will the future acclaim as the best guardians of the family, the men who framed the law or the women who under it enjoy greater powers than in the past.

Ambiguous.

A correspondent sends us an advertisement for proposals reading as follows:

"Baltimore, June 3, 1907.

"Proposals will be received by the Board of Awards of Baltimore City to erect a building, to be known as Shop Building No. 1, at Baltimore City Jail for the Mayor and City Council."

Perhaps the writer of the above advertisement had in mind recent events at San Francisco.—Engineering News

INTERESTING TO



WOMEN'S DRESSES 4,000 YEARS AGO.

For women archaeology assumes a deeply interesting phase in the question which has been raised by Signor Mosso as to styles in dress as they existed 4,000 years ago. Signor Mosso, the eminent authority on ancient Etruria, the Roman Forum and early Crete, has concentrated his great experience and knowledge on elucidating this bypath of science from his Cretan studies.

The general result has been to confirm the old dictum that there is nothing new under the sun. Even the "latest fashions" are antiquated. Signor Mosso finds that 4,000 years ago the ladies of primeval Mycene wore hats pretty much as they are seen in the show rooms of Paris today—even to the roses and ribbons and the turned-up brim. They knew what crepe trimming was, had tartans before the Scotch, understood the mysteries of corset lacing in front, short wide sleeves, metal belts and a style of dress which an imitative nineteenth century, that considered itself original, dubbed "Empire."

Their principal colors in robes were orange, yellow, blue and purple, which rather upsets the claim of the Phoenicians to have "discovered" purple.—London Globe.

WOMEN GERM EXPERTS.

In its efforts to advance medical science the Rockefeller Institute for Medical Research has enlisted the services of five young women.

The young women are: Miss Nellie E. Goldthwait, Miss Maud L. Menten, Miss Mabel P. Fitzgerald, Miss Bertha I. Barker and Miss Martha Wollstein. It is the ambition of every research worker to become identified with the institute, with its splendid equipment for studying disease germs and trying to discover the agencies for destroying them. The honors which have been conferred on the young women in naming them to fill places on the staff of the institute have attracted widespread attention in medical circles.

Miss Nellie E. Goldthwait has been chosen an assistant in the department of chemistry of the institute and Miss Maud L. Menten, Miss Mabel P. Fitzgerald and Miss Martha Wollstein fellows of the institute. Miss Wollstein and Miss Menten are engaged in pathological work and Miss Mabel P. Fitzgerald in bacteriological work. Miss Bertha I. Barker has been appointed a scholar of the institute.—New York Tribune.

DOES IT OCCUR TO YOU—

That late hours are a frequent cause of the appearance of premature wrinkles?

That if we took the trouble occasionally to "count our mercies" most of us would find that we have more to be thankful for than to grumble at?

That "absence of occupation is not rest"?

That you cannot expect admiration if you never take any trouble to deserve it?

That if you really care for a person you will not say unkind things to or of them.

That personal remarks are seldom in good taste?

That when you meet a friend and say to her, "How poorly you are looking" it is by no means paying her a compliment?

That your children will not love you a bit less for your firmness in saying "no" at the right moment?—Home Notes.

FORTUNE TOLD BY MOLES.

According to an old authority, a mole on right cheek or right arm signifies happiness in love affairs; on the right hand a happy marriage.

A mole on the left cheek or left arm signifies adverse fortune, particularly as regards love affairs; on the left hand, an unfortunate marriage from a worldly point of view.

Moles on the right cheek or arm, in combination with one or more on the left hand, point to more good fortune in love affairs than in money matters.

A mole at the corner of the right eye predicts a rich and indulgent husband. A mole on the right side of the chin shows good fortune, long life. A mole on the chin, if it be light yellow in color, denotes that a woman will be a good housewife; if brown in color, it portends a happy married life.

A mole on the tip of the nose shows to a woman likelihood of much admiration and jealous lovers, in her dealings with whom she is recommended to exercise great caution and discretion.—Pittsburg Press.

HOLLAND'S BRAVE WOMEN.

How much of her wealth and prosperity Holland owes to her women and children! While her men were away at the wars, or extending their possessions, or carrying their goods to all parts of the world in their stout ships, the women and children stayed at home and worked. They made lace, some of which was so fine and beautiful that it was sold to rich nobles for \$400 a yard. They spun cloth, red or black in color, very fine and soft, which they sold in many countries, using for themselves a coarse, cheap

cloth called frieze, which they bought in England. They made butter, too, of the best, and this they sold and the money was turned in for their country's use when it was needed.

Besides the lace, the women of Holland made linen from the flax which they grew in their gardens among the tulips and lilies. This linen was so choice that it was in great demand and it became known by the name of "Hollands."—Pittsburg Dispatch.

SUCCESS OF WOMAN SUFFRAGE.

Sir—Miss Phebe Couzens, who has never lived in any of the woman suffrage States, is quoted in your columns as saying that woman suffrage is a failure. The people of those States do not think so.

After 20 years' experience of woman suffrage as a territory, Wyoming put it into her constitution by a nearly unanimous vote when she came into the Union as a State.

Colorado first adopted it by an act of legislature, ratified by a referendum vote. Eight years later, she put it into her constitution by a majority nearly six times as large as that by which it had been adopted in the first place.

In Idaho, several years ago, the chief justice and all the justices of the State Supreme Court united in a published statement declaring that "woman suffrage is more popular among our people than when first adopted. Although it was carried by more than a two-thirds vote, if the question was resubmitted it would now be carried by a vote almost unanimous."—Alice Stone Blackwell, in the Boston Post.

SANDALS ON PARIS FEET.

French women with small, dainty feet generally have seemed to feel that the joy of tilting along on tall heels is a part of a French woman's heritage. They have turned up their pretty noses at what they termed the "old-womanish flat shoes" affected by Americans. But listen to this: A fashion paper of Paris says shoes with broad toes and low, broad heels are the latest craze among the ultra-fashionable women there. "Not only are broad toes and low heels coming into vogue," says this inspired writer, "but another great change in the trend of feeling of fashionable folk as regards footwear is noticed. Sandals are being worn by some of the best-dressed women. For a long time the Baroness de Meyer has worn them with the graceful early Victorian gown she affects and other women are following her example."—New York Press.

BIRD'S NEST MILLINERY.

Chinese bird's-nest hat has interested Americans, chiefly because it is so different from what the name suggests. Bird's-nests costumes, however are almost as full of interest for the reason that they are exactly what their name implies. Three curious bird's-nest festival costumes were worn recently at Baden-Baden. The hats are the most amazing part of the "get-up." They are made like nests of tiny twigs and leaves and they perch on the top of the head in an extraordinary manner. Apparently they have no anchor, though the band of silk wound around the head and tied low on the back of the neck serves as a hat pin. At least it keeps the hat on straight and saves the wearer much anxiety. It is said that the odd conceit has already become popular in Baden-Baden.—Philadelphia Record.

LOVE INFLUENCED BY DRESS.

One would hardly think that such a beautiful passion as love could be influenced by such a sordid affair as dress; yet the fact remains that this is so in many cases.

The neat, tidily dressed woman is admired by all men who know her; they are attracted to her by reason of her artistic skill in dressing. A young man is delighted to be seen in her company, for it enhances his own reputation. Does it not demonstrate that he has good taste in the choice of, say, a sweetheart?

A young fellow does like to see his sweetheart turn up to meet him on an evening neatly garbed; it not only increases respect, but love for her, and if young women will take a word of advice they will always see to it that they are perfect in every detail, so far as dressing goes, before setting out to keep appointments with lovers.—Pittsburg Press.

FASHION NOTES.

Violet is in great favor for millinery. Scarfs of chiffon or crepe de chine are frequently worn with lingerie dresses.

Shantung silk is being much trimmed with braid. While the lingerie gown is more fashionable than ever, pique is rarely seen.

The cherry craze has not waned as yet, and they are seen in all colors, particularly red and bright green. With silk frocks are worn enormous fans of talag straw or crinoline, surmounted by aigrettes or waving paradise plumes.

Petticoats are built of the most supple materials, filmy cambric, trimmed with soft laces of broderie anglaise and soft ribbons, or of the most supple taffeta.

The starched upright collar is again coming into favor. Indeed, it has never been given up by many French women.

An attractive fashion is to trim white straw hats with a profusion of wings, either white, colored or speckled, the crown of the hat being braced with velvet.

One of the prettiest hats worn at the new play at the Theatre Rejane, in Paris, was of violet-colored straw, wreathed with violets and veiled with a long violet veil.