

## ORCHARD and GARDEN

### PIG RATIONS AND RESULTS.

The Storrs Agricultural Experiment Station, of Connecticut gives in bulletin 43 the following conclusions on pig feeding rations:

The pig among farm animals is noted for his great capacity for assimilation. But with the animal the economy of gain is greatly affected by the character of the ration.

One lot of three pigs required 2,739 pounds of skim milk containing 230 digestible nutrients for 100 pounds of gain. Eight lots, of 23 pigs required 1,086 pounds of skim milk and 253 of shorts, containing 258 pounds of digestible nutrients, for 100 pounds of gain. And one lot of three pigs required 445 pounds of shorts containing 394 pounds of digestible nutrients for 100 pounds of gain.

Milk is an easily digested food. When fed alone in the above trials, 100 pounds of gain were made from the least amount (230 pounds) of digestible nutrients. When shorts were substituted for a portion of skim milk, more nutrients (258 pounds) were required for 100 pounds of gain in weight. When shorts were fed alone the most nutrients (294 pounds) were required for the same gain.

The reader should bear in mind that the financial problem is not here considered. It is admitted that while skim milk is easily digested, it is too bulky in character. The capacity of the pig to digest and assimilate is greater than its capacity to consume this watery fluid. At ordinary market prices, a pound of digestible nutrients would cost twice as much in skim milk as in shorts. Experience shows that from a financial standpoint, the most economical gains are made when skim milk and grain are fed in the proportion of 3-4 to 1. But the trials show from a physiological standpoint that less nutrients are required for a given gain when the ration consists of easily digested foods. The conclusion seems warranted that the food requirements for maintenance and for production (milk or growth) depend not only upon the composition and digestibility of a ration but also upon the facility with which it is digested and assimilated.

### ABOUT CHURNING BUTTER.

The temperature for churning depends upon the time of year, weather, etc., and is from 50 to 56 degrees. A thermometer should be used in getting the cream into the right temperature. A good butter maker says he quits churning when the butter granulates, and the grains are the size of wheat grains and are well separated from the milk. Draw off the buttermilk through a strainer. Add water until the butter floats, the temperature being about the same as that of the butter. Wash twice or until the water runs off clear. Take the butter from the churn and spread it out to be worked and salted. After the salt has been added work until the butter is well gathered and then let stand for an hour until the salt thoroughly dissolves.

The proper amount of salt to use is one ounce to every unworked pound of butter. It is best to always weigh the salt. Work the butter well to work out the excessive moisture, thoroughly mix the salt and give it a good body. Avoid overworking, as it will make it greasy, injuring the grain. The way to tell when to stop working is when the butter breaks with a clean break, not when it pulls out in threads.—Indiana Farmer.

### FARM NOTES.

First plow, quite deep, harrow carefully, next test the seed, cultivate often to keep weeds down and a dust mulch over the field for conserving the moisture.—Prof. W. R. Gilbert, Penobscot County, Me.

Rusty iron placed in the drinking water at this season serves an excellent purpose as a tonic.

The man who keeps his pens on short rations usually finds his eggs coming in in about the same proportion.

Poultry raisers should learn the causes of diseases, how to prevent them, and there will be no need of medicines in the poultry yard.

Kill the hen that lays one day and sits three days during the egg-producing season. Her room is worth more than her product.

It is important that the interior of the houses, including the floors, be dry and that plenty of fresh air can get into the pens without drafts.

A big "pigeon fly" is being arranged by John H. Good, of Louisville, Ky., assisted by the Southern Poultry Magazine, to take place on the opening day of the Tennessee State fair, September 23d, at Nashville.

### REGULAR HOURS FOR FEED.

Many farmers do not realize the importance of feeding their stock at regular hours, but it is of great importance. Take a lot of hogs which have to wait after their regular time for feed and see how restless and noisy they become. And what is true of them is true in a great measure of other animals. The man who is regular in his habits, eating at a regular hour, will, other things being equal, thrive best and be healthiest and strongest; and what is true of man in this regard is correspondingly true of the lower animals. A farmer can readily get into the habit of feeding his stock regularly and they will learn to expect it at a regular time and rest

patiently until the next feeding period comes about. Experiments in this direction would soon satisfy the most doubting person of the truth of the value of regularity in feeding.—Epitomist.

### VARIATION IN COW'S MILK.

The seasonal variation in cow's milk, ascertained from a five years' study in a herd of about six hundred cows, all registered or graded Jerseys, on a New York estate, disclosed the rather interesting fact that the richest milk, that containing the greatest proportion of fats and totals solids, is obtained during December, January and February, in the order named.

March and April are not very far behind but the decrease is practically continuous until July, when it reaches its low level, after which follows a gradual monthly increase until December.

The average composition for the whole year period, as published in the Journal of the American Chemical Society, is fat, 5.2; solids not fat, 9.22; a total of 14.64. The protein content is calculated at 3.66 the milk sugar at 4.81 and the ash at .75; all being percentages.—Epitomist.

### THE FALL CALF.

The beef calf that is born in the fall must be kept growing. This will require more care on the part of the farmer than it would if the calf were born in the spring and had the use of the luxuriant pastures of early summer. The fall calf must be kept warm as well as be well fed. As soon as the dam begins to be insufficient other milk should be given, preferably fresh separator skim milk. Clover hay should be fed at an early age and some corn given daily as soon as the calf will eat it, especially if the owner is able to give other food rich in protein. Calves digest corn better than mature cattle—Iowa Farmer.

### THE IMPROVEMENT IN FARMING.

It has been said that the farmer makes life on the farm a drudgery; this assertion belongs more to the remote past than to the present or future, as with all the modern improvements in agricultural machinery a farmer can accomplish his work in much shorter time and more satisfactorily.—Weekly Witness.

### GOOD RESULTS IN THE DAIRY.

Good air and sunlight in the barn healthy cows kept clean, a good cream separator with a good tank and plenty of ice, and careful handling of the milk and cream, will secure the best results in the dairy.—Weekly Witness.

### OLDER THAN ROMULUS.

Traces of a Great City on the Site of Rome Before Roman Days.

Information has been received from Rome of new archaeological discoveries on the Palatine Hill which tend to confirm by new evidence the hypothesis advanced some years ago by Giacomo Boni, director of the Forum excavations, that a people much more ancient than the earliest Romans so far recognized once occupied the site of Rome.

Signor Boni, who has successively uncovered vestiges of the empire, republic and kingdom, has found along the Via Sacra tombs in the form of wells, with pottery, jewelry, amulets and skeletons, which he believes are of a people who lived much anterior to the Romans properly so called.

The discoveries have caused many controversies. The utmost admitted was that some people had occupied the territory prior to the time that Romulus and Remus are reputed to have founded the Eternal City. Recently excavations of the Palatine Hill have brought to light sepulchres of great antiquity, apparently sustaining Signor Boni's contention. There are tombs in the form of wells like those of the Forum, and seemingly they belonged to the most primitive inhabitants of the Palatine acropolis.

### Brains of Famous Germans.

Prof. von Hansemann, the noted scientist of the Berlin University, has examined the brains of the late Theodore Mommson, the historian; Hermann von Helmholtz, the physiologist and Adolf Menzel, the painter. He declares that, according to the results of his investigation, while genius is not exactly akin to madness these famous men possessed slight "water head" (hydrocephalus), and that this condition, for example, explains Menzel's extreme irritability and occipital cramps from which Helmholtz suffered. Prof. von Hansemann also discusses how these men were able to work at extreme old age with their faculties apparently unimpaired—all lived and worked for over seventy years. He explains that with mathematicians and athletes, so with them—work becomes a second nature, a part of the individual. In other words, genius is nothing more than an indomitable inclination expressed through intense application.

### Open-Air Sleeping.

It is not too much to say that to the delicate, highly strung, easily knocked out individual the advantages of sleeping in the open air are enormous. Pallid cheeks take on a ruddy hue, colds are unknown, nerves are forgotten and irritability becomes a phase of the past. A little but and a little perseverance are the only necessities, and the result is assured.—Country Life.

## How To Be Very, Very Popular

By O. S. Marden.

NEVER hesitate to talk about yourself and your affairs. This will interest everybody.

Do not fall to throw cold water on other people's plans and to discourage their ambition. Nobody is sensitive about this.

Be sure to dwell upon the defects and failings of others, and call everybody's attention to them. Everybody likes gossip.

Never try to stop gossip, no matter if it does drive an innocent person insane or to suicide. There is no reason why you should be deprived of a little innocent pastime just because of others' sensitiveness. Pass the gossip along. Add to its spiciness.

Always be on the watch for slights and insults. Remember, most people are your social superiors and are trying to cut you for your lack of popularity. There is nothing which will endear one to others like selfishness. Everybody admires it.

Always take the best seat wherever you go, and, after you are well seated, offer your seat to others without the slightest intention of getting up. Just look out for your own comforts. Let other people do the same.

Never do anything that you do not feel like doing.

Do not talk unless you feel like it. Just get in a corner and read or lie down and take a nap. Never mind who is present. Let some one else entertain the guests.

Do not bother about trying to be agreeable at the breakfast table. Just hide yourself behind your paper, and fault with the food and snap at the servants.

To be popular with the servants, vent your spleen upon them at every opportunity. Find fault with everything they do for you at home or anywhere else. They are servants and are used to it. They have no business to be thin-skinned.

Never hesitate to show it when your feelings are hurt, or to indicate your jealousy when others receive more attention or are better dressed than you. If things do not suit you, slam things around the house. Be just as disagreeable as possible. Never mind if you break a thing or two now and then. It will relieve the blood pressure on the brain.

Always remember that praise is a splendid thing for you, but very bad for others. It encourages vanity, and people who are praised get so "puffed up" and "big-headed" that there is no living with them.—From Success.

## Woman as an Egotist.

By Winifred Black.

FOUR young girls killed themselves at the same hour in Iowa the other day. It turns out that they were just four of ten members of a suicide club, and that the other six are bound by the rules of the club to commit suicide together within some stated time.

There is nothing surprising about this hideous story to me.

The one most fearful enemy to sanity in the world is egotism, and half the women I know don't think about a thing on earth but themselves from morning until night, and from night until morning again.

I, me, my new hat, my new dress, the way I do my hair, my pretty shoes, my beaux, my enemies, the girl who admires me, the man who doesn't care for me, the mother who doesn't appreciate me, the brother who laughs at me, the little sister I have to take care of, the dance I didn't get to go to, the candy the other girls had, and that I didn't take.

"I, I, I, me, me, mine, mine, mine"—why if I lived in a world as little as that, I'd join a suicide club today, and get out of it. The middle-aged woman isn't so bad, she can't be, she has to think of her husband and her children and her servants, and she doesn't regard the world as a huge mirror, good for nothing but to reflect her foolish little figure. But next to the young girl, the most awful egotist on earth is the woman with nerves, or the woman with an inherited tendency to something or other which she is carefully nursing to hand down to her own children.

All she thinks of is her food and whether it will agree with her or not. Take her for a walk in the green fields, and she doesn't feel the perfume of the roses, she doesn't take a deep draught of the sweet life-giving air and thank heaven for the glorious privilege of living; not she.

"This walk will agree with me," she thinks; "it will make me sleep and what an appetite I'll have for luncheon."

Go with her for an evening at the theatre and she doesn't laugh and enjoy the play; not she.

"This will divert my mind," she says to herself. "I must fix my attention on it. I can feel my eyes brightening already, I believe I am feeling a little better; yes, that pain in my left elbow is almost stopping."

Heaven save us all from the hideous insanity of egotism in whatever form it comes to pester us!—New York American.

## The Habit of Threatening Children

By Marianna Wheeler.

THE habit of threatening is a bad element in the training of children; unless threats are meant, the mother has nothing to gain in using them, and she loses much of the respect of her child. In a remarkably short time he learns that the mother's threats are mere words, that they mean nothing; so he continues to do exactly as he pleases in spite of them, while the mother sighs and wonders why her child is so disobedient.

I heard recently of a mother who told her little girl to change her shoes before going to drive. The child fretted and whined, and while she did not positively refuse, neither did she make any effort toward obeying the mother's request. After ten or fifteen minutes of unpleasant skirmishing between mother and child came the threat, "Very well, then; you shall not go to drive with me unless your shoes are changed."

At this the little girl made a sudden run for the hall, then slowly edging her way sideways down the stairs, kept calling back, "I'm going to get in the carriage, I'm going to get in the carriage." She kept this up until she reached the door, then darted out and did get into the carriage. The mother meanwhile was helplessly exclaiming: "What is there to be done with such a disobedient child. I know I ought to bring her right back and insist upon her minding me, and really she should have a good spanking; but if I attempt to bring her back she will scream and kick, so I suppose I must give in rather than have a scene."

When the mother went out, this prematurely wise little girl greeted her with the sweetest smile and these words: "You did not mean a word of what you said, did you, mother? I knew it." And with a knowing twinkle in her eye she added, "If you really want me to I'll change my shoes next time." The mother, who but a moment ago was distressed and mortified at the disobedience of her little girl, now laughed and thought her remarkably clever and so she was.

All the greater is the pity that a child naturally so bright and really lovable should not have her rare talents developed by judicious management.—Harper's Bazar.

## Society in London.

By Mrs. George Cornwallis West, Formerly Lady Randolph Churchill.

THE craze of the day is to be, or to appear to be, earnest. To be rich and beautiful is not sufficient; the real social leaders of the day are not content with these accidents of birth and fortune. They aspire to political influence or to be thought literary and artistic, and society follows the lead. It is the fashion to attend lectures and court Bernard Shaw, to indulge in oratorios and eighteenth-century concerts, to breathe Bach and Beethoven.

The standard of education and culture is higher nowadays for the majority than it used to be in the old days. Formerly women stayed at home, and had more time to perfect their education, but much time was taken up with the writing of mawkish diaries and in the execution of feeble sketches. Then you had a few shining lights who stood out above the crowd, now hundreds are to be seen. It takes a remarkably clever woman now to become very prominent by her own merit.

The hurry of the age is one of its chief characteristics. To crowd into twenty-four hours the occupations and amusements of a week seems to be the aim and object of most people.

The extraordinary restlessness, the craving for something new before there has been time to understand or enjoy what is in hand, is of a necessity causing manners to deteriorate, and is certainly curtailing the amenities of social life on which past generations set such store. A nod takes the place of the ceremonious bow, a familiar handshake of the elaborate curtsy. The carefully worded, invitation of fifty years ago is dropped in favor of the generally garbled telephone message such as, "Will Mrs. S. dine with Lady T. and bring a man? And if she can't find one, she mustn't come, as it would make them thirteen;" or a message to a club, "Will Mr. G. dine with Lady T. tonight? If not will he look in the cardroom and see if any of her lot are there and suggest somebody?"—Harper's Bazar.

## INTERESTING TO



### WOMEN PLAYING WITH CHILDREN.

A certain amount of work, or rather play, with children in some kindergarten was advocated for all young girls of the high school age by speakers at the meeting of the New York City branch of the Vassar Students' Aid Society at the Hotel Astor recently. The speakers were kindergartners from other cities who are attending the International Kindergarten Convention. They declared that it was important for young girls to be brought more closely into contact with children in order to develop that quality of "nurturing something else" which "is the highest attribute of human nature," and to free modern girlhood from "that conventionality which is the bane of young women."

Incidentally two of the speakers criticised the college method of today, though from different points of view.

Mrs. James Hughes, of Toronto, told a story to illustrate how helpless many young mothers are in the face of their babies' needs.

"I visited often in a certain house where there was a baby," she said, "and one day I got down on the floor and played a finger game with the child. The next time I called, the instant the baby saw me he seized my hand and patted the floor, as a peremptory reminder that I was to sit down and play the game again. Now, that mother didn't know how to be a child with her child. She was charming, and she loved baby dearly,—but she'd never learned to give it what it craved."

Touching on the question of colleges, Mrs. Hughes remarked that a great deal was said about the defective education of women, but she believed the education of men was just as defective. She thought that college training and curricula tended too much to the material, were too much shaped to the sole end of giving the student a vocation.

But Miss Bertha Paine, of the School of Education at the University of Chicago, took the opposite view.

"I believe," she said, "that the restlessness which so many college boys show along about their sophomore year is due to the fact that they find so little in their work that is concrete. Sometimes I think the most valuable part of college life is the management of a fraternity house, things of that kind that come incidentally. The poor boy gets that sort of discipline in his home life and work. The one who is better off frequently doesn't."

The election of officers of the society took place at a business meeting held early in the afternoon. Those elected were: Mrs. Charles W. Stimson, president; Mrs. Charles E. Potter, treasurer; Miss Mabel McMahon, recording secretary, and Miss Edith Deane, second director.—New York Tribune.

### TWELVE REASONS FOR LOVE.

Do you love? Are you going to marry? Then you must give 12 reasons for your love.

A recent authority on love and matrimony says: "Don't marry unless you can take a pencil in hand and write down 12 substantial reasons for loving that particular person.

Can you give 12 reasons? Love has not reason nor does it listen to reason. It is to be doubted if the happiest married couples in the world could give 12 reasons for marriage of 12 reasons why that marriage has been a happy one.

A man married because SHE is trim and dainty, because he is lonely and she mothers him, because she can sew and keep house, because she makes him feel a comfort to himself and to mankind, because she is the one woman in the world to whom he can confide his sins and fears, his hopes and ambitions without feeling like a fool.

A woman marries because HE has a nice smile, because he sends her flowers, puts on her overshoes, takes care of her, has heart or brains which appeal to her, because he needs her, because he magnifies her virtues and overlooks her faults, because he is the only man she knows who can enter the very garden of her soul without trampling flowers.

But where are the TWELVE SUBSTANTIAL REASONS? Love bears burdens without feeling them, but love does not reason.

What has a tangle of curly hair to do with reason? Yet it may have all to do with love.

What has the power of a pair of square shoulders to do with reason? Yet those shoulders may have all to do with love.

A breath, a song, a word, a smile, a tear, all these are without reason, but what have they not to do with love?

Men and women who are happiest in their marriage LOVE BECAUSE THEY DO AND MARRY BECAUSE THEY CANNOT LIVE WITHOUT; in that marriage there needs be no reason except—love.—By Cynthia Grey, in the Pittsburg Press.

### WHAT NOT TO WEAR.

A poorly fitting corset under a well made dress.

White muslin petticoats for street wear.

Bordered lace veils unless they are worn below the chin, and dotted veils with weak eyes.

Trailing skirts on a stormy day.

Ripped or torn kid gloves at any time.

Large buttons for fastening a waist over a stout figure.

Rose pink accessories under or over a wrinkled face or neck.

Gray or navy blue veils over a sallow complexion.

Round hats with a full face and a peaked crown with sharp-faced features.

Linten collars with a homely neck, or linen cuffs with dark, thin or wrinkled hands.

Tightly drawn back hair with a thin face, and a high coiffure with a long head.—New Haven Register.

### GOOD LOOKING WOMEN.

The beauty of the modern woman is not looked upon as a silly vanity except by the old fogies who have not yet emerged from the mists of milked-out prejudices. Modern thought now recognizes good looks as a symbol of excellence within. Old-fashioned mothers considered beauty a dangerous gift. The mother of today knows that ugliness is a handicap and she teaches her little daughter to cultivate beauty in every form—the beauty of cleanliness, of charming manners, of unselfishness, gratitude, thoughtfulness, bodily grace and spiritual activity. In many other ways she old-time people misunderstand the purposes of creation. To their way of thinking it was a mistake to be too happy; everything that made one happy was more or less sinful. Now we figure it out another way; what makes us miserable makes others miserable, and to distribute discontent and unhappiness is to be a full-fledged sinner and no mistake.—Pittsburg Press.

### EMPLOYMENT OF WOMEN.

Industrially, no country can make a showing that in any degree equals that of the United States as regards its women. The census of 1900 shows that 320,000 American women are teachers, 15,000 are painters and sculptors, 45,000 are musicians, 261 wholesale merchants, 1,271 bank officials, 1,922 stock raisers, 378 butchers and 193 blacksmiths; 209 American women keep bars or serve the drinks in bars, 879 are policemen and detectives, 13 are railroad conductors, 4 station agents, 2 steamboat pilots, 127 locomotive engineers, 153 boatmen, 167 masons, 545 carpenters, 45 plasterers, 126 plumbers, 1,750 painters and glaziers, 241 paper hangers, 1,775 tin workers, 3,370 iron and steel workers, and 8 steam boiler makers.

### WOMEN IN THE CHURCHES.

Miss Lavinia D. Smith, a graduate of Wellesley College, '94, has, since her graduation, followed a unique career, says a writer in Progress. After spending several years in training at Episcopal sisterhoods in this country, she became Sister Lavinia of the Community of the Holy Family, England, and lately received from the Archbishop of Canterbury, in Lambeth Palace, the old academic title of student of theology, and a diploma equivalent to the Honors School in Theology at Oxford and Cambridge. Sister Lavinia and the four other candidates who received the diploma are, it is understood, the first women to take these examinations in theology and to receive this title. Their papers were corrected by the professors who set the examinations, but Sister Lavinia's papers were also read by the Archbishop of Canterbury and the Bishop of Gibraltar.—New Orleans Picayune.

### THE GIRL WHO WOULD IM PROVE.

Must make up her mind to think a little less about herself and a little more about the comforts of others.

To be less quick of speech and more certain in actions than she has been.

She must resolve not to let the wicked little demon of envy enter her heart and make her bitter and fault-finding.

To consider those of her own household and to fight the inclination to reserve her virtues and her graces for those outside.—New York Press.

### FASHION NOTES.

The passing of the high bandeau is a great point in favor of the new millinery.

The raglan sleeve is not only voluminous, but it is long and the puff falls far below the hand.

Soutache braid is generously employed in the decoration of the linen suits.

Both checks and stripes figure among the fancy voiles, and the colorings are of the unaggressive sort, usually combining several shades of one color of a soft tone with white.

Never has there been a style more ungainly or unbecoming than this tilting of the hat to an alarming degree at the side, back of the head and down over the brow.

The taffeta capeline, made with the "beef-eater" crown, has sung its song and vanished—even from the outer boulevard.

There is no particular smartness about hats, but they are losing the bravado, "Rough Rider" air borne at the beginning of the season.

The new bandeau is a low, round, modest affair, which barely lifts the hair from the coiffure and tilts it not at all.