



TEST FOR WHOLESOME MILK.

A good way to tell when to use new milk from the cow is to bring a sample to a boil and if it curdles then do not use it, but if it remains limpid it is all right.

APPLE BUTTER FOR MARKET.

Why do not farmers who have large amounts of apples that do not pay for drawing long distances to market try the plan of turning some of the surplus into apple butter?

AN ELECTRIC INCUBATOR.

A novelty in the hatching of eggs has appeared in the shape of an electric incubator. The special feature of this machine is that the heat of the egg drawer is automatically regulated to the fiftieth part of a degree Fahrenheit.

COWS IN WINTER.

Feed to a considerable extent determines the quality and quantity of the milk and butter. It does not pay to keep a cow on half rations and hardly get a good milking at any time during the winter.

THE CISTERN RESOURCE.

"How much will your cistern hold?" I asked a friend, relates Hollister Sage. "Oh, half a dozen hogheads or more. It cost me \$20." Twenty dollars for an unfilling supply of water which is never contaminated by soil-leachings!

PLANTS FOR WINTER.

The fall is the time for preparing those plants that are chosen to brighten the home with leafage and bloom during the winter. The first point to be considered is the choice of the plants.

garden earth and leaf mold mixed into the oven, and bake it half an hour.

This will kill all insects, and when the earth is cool is ready to use. Cut off all water-soaked roots, and then press the earth firmly around the plants, using always the common red earthen pots with separate saucers for each pot.

Keep rotted plants in a shady place for a week or so, until the roots are well settled in their new homes. Do not let these plants bloom for a month or two, but pinch off all buds, that the strength of the plant may be concentrated in the roots, in order to produce a new, vigorous growth of branches.

In choosing the windows for plants during the winter those with gay-colored blossoms need all the sunlight they can have, and for them a south window is the best. A southeast window is the next most desirable, then a western window, while a north light is worst of all.

There are a few plants, like pansies, primulas and cornelias, that like the shade and thrive in northern light, and a northern window is useful to place blooming plants in from time to time, thus prolonging the short life of the sprays of flowers.

The best success in indoor plant growth comes from a uniform temperature of fifty to sixty degrees at night and from sixty to seventy-five degrees during the day. A higher temperature is only needed by semi-tropical flowers.

Plants not only need a cooler temperature in the night, but also darkness, and it is neglect of this fact that is one of the causes of the lanky growth of house plants. Shield plants with newspapers in the evening if the gas in the room is lighted. The paper will keep both heat and light from the plants.

Another cause of spindling growth is lack of air. Plants shut up in the house get sensitive, and are liable to suffer if there is a sudden fall in temperature, but if they are given plenty of fresh air daily, unless the day is very inclement, the plants will thrive and be sturdy.

Do not open a window directly on plants in winter weather, but rather let the fresh air filter in more gradually through a distant door or window.

Plants in windows should be turned once or twice a week. A fine form, which is half the beauty of a plant, cannot be attained without this. Plants should also be shielded from the dust which arises in sweeping and dusting rooms.

A newspaper is suitable to prevent the settling of dust over them, but this care is not enough. Each plant must be washed thoroughly and frequently to keep its pores unclogged, for plants breathe through them. They cannot grow if their means of inhaling carbon and exhaling oxygen is taken from them. Showering plants over a tub or sink is a good way to remove dust, but hold the plant sideways, so both sides of the leaves will be reached by the water.

FARM AND GARDEN NOTES.

Hens that are crowded will not lay.

Hens will not lay when shivering with cold.

Do not change all the old hens for young pullets.

Dispose of any old hens you do not wish to winter.

The size of the sheep should be gaged to suit the pastures.

Cornmeal and bran with milk is a good feed for ducks.

The manure from the pig is valuable in proportion to the food consumed.

Use nothing but pure bred males, no matter how your flocks may be made up.

Fruits and flowers have been rightly called "children of the light woven from sunny air."

Bear in mind that the sooner the hens pass the moulting season the sooner they begin laying.

Do not risk too many flocks together. Small flocks carefully tended will give the best results.

You cannot afford to buy all your home supplies, no matter how big crops you grow to sell.

No one can afford to buy manure until he has first made use of every pound produced at home.

A small herd of cattle well fed will pay better than a large one that just "pulls through."

Young hens and the early pullets will bring more money now than as "old roosters" next spring.

During the winter it is quite an item to arrange so that the fowls can have as much sunlight as possible.

What is a good sheep? It all depends on what the sheep is wanted for and the man who takes care of it.

Stick to the breed that you have done well with. Improve and build it up rather than let it fall back.

When a sheepman finds occasion for grumbling it would be well to quit the business and try something else.

Give the young pigs plenty of succulent food. A slop made of bran and potatoes makes an excellent food.

No mercy should be shown to the dog that rushes out and barks at a passing team. He should be shot at sight.

Using ewes that have borne twin lambs, raising young ewes from twins and using rams that were twins, have given good results in increasing the productivity of the flocks.

France has imposed a tax on traveling bicyclists.

The Youths Companion

The last year has been the most prosperous of the Sixty-five years of THE COMPANION'S history. It has now over 550,000 subscribers. This support enables it to provide more lavishly than ever for 1893. Only a partial list of Authors, Stories and Articles can be given here.

Prize Serial Stories.

- The Prizes offered for the Serial Competition of 1892 were the Largest ever given by any periodical. First Prize, \$2,000. Larry; "Aunt Mat's" Investment and its Reward; by Miss Amanda M. Douglas.

The Bravest Deed I Ever Saw,

will be described in graphic language by Officers of the United States Army and by famous War Correspondents. General John Gibbon. General Wesley Merritt. Captain Charles King. Archibald Forbes.

Great Men at Home.

How Mr. Gladstone Works; by his daughter, Mrs. Drew. Gen. Sherman in his Home; by Mrs. Minnie Sherman Fitch. Gen. McClellan; by his son, George B. McClellan. President Garfield; by his daughter, Mrs. Molly Garfield Brown.

Your Work in Life.

What are you going to do? These and other similar articles may offer you some suggestions.

- Journalism as a Profession. By the Editor-in-Chief of the New York Times, Charles R. Miller. Why not be a Veterinary Surgeon? An opportunity for Boys; by Dr. Austin Peters. In What Trades and Professions is there most Room? by Hon. R. P. Porter.

Things to Know.

- What is a Patent? by The Hon. Carroll D. Wright. A Chat With Schoolgirls; by Amelia E. Barr. Naval Courts-Martial; by Admiral S. B. Luce. Patents Granted Young Inventors; by U. S. Com. of Patents. The Weather Bureau; by Jean Gordon Matfill. Newly-Married in New York. What will \$1,000 a year do? Answered by Mrs. Henry Ward Beecher and Marion Harland.

Over the Water.

- How to See St. Paul's Cathedral; by The Dean of St. Paul. Windsor Castle. A picturesque description by The Marquis of Lorne. A Glimpse of Belgium. The American Minister at Brussels. A Glimpse of Russia; by The Hon. Charles Emory Smith. Adventures in London Fogs; by Charles Dickens. London Cabs. "Cabbies;" their "hansoms," Charles Dickens, Jr. A Boy's Club in East London. Frances Wynne.

Short Stories and Adventures.

More than One Hundred Short Stories and Adventure Sketches will be given in the volume for 1893.

- Knittin' Susan. An Able Mariner. Quality's Temptation. In the Death Circle. Uncle Dan's Will. A Bad Night in a Yacht. A Mountainville Feud. On the Hadramaut Sands. Leon Kestrell: Reporter. Mrs. Parsley's First Voyage. An April First Experience. Uncle Sim's Clairvoyance. Bain McTicke's "Vnat Doog." Riddling Jimmy, and other stories. How I wrote Ben Hur. The Cats of Cedar Swamp. A Boy's Proof that he was not a Coward; by Strong "Medicine." The amusing effect of a brass instrument on a hostile Indian; by Capt. D. C. Kingman, U. S. A.

"How I wrote BEN HUR," by Gen. Lew Wallace, opens a series, "Behind the Scenes of Famous Stories." Sir Edwin Arnold writes three fascinating articles on India. Rudyard Kipling tells the "Story of My Boyhood." A series of practical articles, "At the World's Fair," by Director-General Davis and Mrs. Potter Palmer, will be full of valuable hints to those who go. "Odd House-keeping in Queer Places" is the subject of half a dozen bright and amusing descriptions; by Mrs. Lew Wallace, Lady Blake, and others. All the well-known features of THE COMPANION will be maintained and improved. The Editorials will be impartial explanations of current events at home and abroad. The Illustrated Supplements, adding nearly one-half to size of the paper, will be continued.

Send This Slip with \$1.75. FREE to 1893. To any New Subscriber who will cut out and send us this slip with name and address and \$1.75, we will send The Companion Free to Jan. 1, 1893, and for a Full Year from that date.

THE YOUTH'S COMPANION, Boston, Mass. Send Check or Post Office Order at our risk.

Military Ballooning.

Most people will remember the unlucky fate of M. Eugene Turpin, the well-known French scientific man who invented melinite—that terrible explosive—and who about twelve months ago was sentenced by a military court to five years' imprisonment, in connection with the trials for treason instituted by the Ministry of War.

Turpin accepted his fate uncomplainingly and it appears that he has been at work, so far as the prison regulations would allow, since his conviction. He is at present in a house of detention at Etampes, where he is allowed pretty large liberty for studying military science and aeronautics. He is even allowed to write to the papers, and a recent journal expresses a regret that valuable discoveries such as Turpin claims to have made should be dated from between prison walls.

Among other things, he professes to have at last solved the difficult problem of aerial navigation by the construction of a balloon which can be guided according to the will of the occupant. He hopes to attain a speed of forty kilometers an hour.

In another field of aerostatics—namely, military ballooning—the imprisoned engineer has been studying an apparatus for making pure hydrogen gas, which will require only one-ninth part of the machinery now in use—an important consideration when on the march.

A new fuse for shells when used at sea, which prevents the projectiles from exploding from ricochets on the water, is also among the inventions to which Turpin has devoted much time.—New York Journal.

France has imposed a tax on traveling bicyclists.

Cats Are Independent Animals.

The cat's spirit of independence, indeed, is the most distinct characteristic of her nature. As Mme. de Custine rightly said, the cat's great difference from, and, according to her sentiments, superiority to, the dog lies in her calm insistence on selection which invariably accompanies her apparent docility. To the dog proprietorship is mastership; he knows his home, and he recognizes without question the man who has paid for, feeds and, on occasions, kicks him with all the easy familiarity of ownership. He follows that man undoubting and unnoticed, grateful for a word, even thankful for an oath. But the cat is a creature of a very different stamp. She will not even stoop to conquer, nor be tempted out of her nature by offers of reward. She absolutely declines instruction; nay, even persuasion is lost upon her for any permanent effect it may be designed to have. You may be the legal possessor of a cat, but you cannot govern her affections.—Henriette Ronner.

Gooseberry Rais.

G. Reade, in the Zoologist, says that the ripe gooseberries in his garden were disappearing very rapidly this year, and he supposed that the mischief was being done by blackbirds. However, his attention was called to a large rat taking the berries off with his mouth and dropping them to other rats below. Presently another climbed the tree and helped to gather the berries. In a little time both came down each with a berry in its mouth, having a curious appearance. Mr. Reade saw the performance several times repeated. Then he placed a wire cage under the tree, and in three days caught nine of the intruders.

The sardine factories at Eastport, Me., consume 8000 barrels of cottonseed oil in a season in the process of turning small herring into imported French sardines.

The first cast iron plow was made in 1797.

DR. KILMER'S SWAMP ROOT THE GREAT KIDNEY, LIVER AND BLADDER CURE. Biliousness, Headache, foul breath, sour stomach, heartburn or dyspepsia, constipation. Poor Digestion, Distress after eating, pain and bloating in the stomach, shortness of breath, pains in the heart. Loss of Appetite, A splendid feeling to-day and a depressed one to-morrow, nothing seems to taste good, tired, sleepless and all unstrung, weakness, debility. Guarantee—Use contents of One Bottle, if not benefited, druggists will refund you the price paid.

Garfield Tea Overcome results of indigestion, biliousness, constipation, nervous debility, headache, dizziness, etc. At Druggists, 50c. Size, \$1.00 Size, "Invalid's Guide to Health" free—consultation free. DR. J. C. GARFIELD & CO., BINGHAMTON, N. Y.

Garfield Tea Cures Sick Headache

RISEING SUN STOVE POLISH DO NOT BE DECEIVED WITH FAKES, IMITATIONS, AND PATENTS WHICH STAIN THE HANDS, INJURE THE IRON, AND BURN OFF THE PAINT. The Rising Sun Stove Polish is Brilliant, Obdurate, Durable and the consumer pays for no tin or glass package with every purchase.

SHILOH'S CURE. Cures Consumption, Coughs, Croup, Sore Throat. Sold by all Druggists on a Guarantee. WORN NIGHT AND DAY! Holds the worst rupture with ease under all circumstances. PERFECT CURE. New York Improved Illustration of and rules for self-measurement correctly made. S. S. Benson, 815 Broadway, New York City.

SAMPLE FREE We Want You Patented Novelties. Write for it and we will send with it a sample of a money maker. EUREKA MANUFACTURING CO., Box 531, LeRoy, Wis., U. S. A. OPIUM Morphine Habit Cured in 10 to 20 days. No pay till cured. DR. J. STEPHENSON, LeRoy, Ohio. First Remedy for Catarrh is the Best, Easiest to Use, and Cheapest. CATARRH Sold by druggists or sent by mail. No. 31, T. Henshaw, Warren, Pa.