

HOW TO KEEP MILK SWEET IN HOT WEATHER.

We shall never learn to keep milk sweet in hot weather until we first understand what makes it sour. The souring of milk is due to a germ called bacteria lactic acid, or, in plain English, lactic acid bacteria. There are very few, if any, of these bacteria in the milk as it comes from the cow. They find entrance to the milk in various ways, and increase very slowly so long as the milk is kept below 40 degrees. The higher the temperature is raised, the more rapidly they increase, and the growth becomes rapid when the milk is kept at a temperature of from 60 to 70 degrees. When it reaches from 80 to 90 degrees, or as long as it maintains about the temperature of the cow, around 98 degrees, the increase is very rapid and that stage of development called souring is reached in a comparatively short time. Therefore the aim of the farmer who would keep his milk sweet is to prevent the entrance of these bacteria in large numbers and to keep down the temperature at least to that of well water, or about 60 degrees.

There is no trouble whatever in keeping milk sweet a reasonable length of time, if it is handled in a cleanly way, always in clean utensils and in clean surroundings. Many a town woman has complained that the milk will not keep sweet even a day when the trouble is that the milk has been spilled in her refrigerator and it is filled with the germs of lactic acid bacteria. If there should be one clap of thunder in the twenty-four hours, she will blame that for the souring of the milk, whereas the fact is that neither lightning or thunder has the slightest effect on milk. It sours solely through the growth of lactic acid bacteria. There are various other kinds of bacteria which may cause the milk to decay, but the souring comes only through this particular kind of bacteria.

Many a farmer's wife complains that the milk will not keep sweet, whereas any person who has given the subject careful study will not be slow in locating the cause, namely, cans, the germs of which are full of these bacteria. These germs are killed at a temperature of about 130 degrees, 32 degrees less than boiling water. They are also killed by sunlight. If the vessel that is to contain milk has first been washed with cold water, then thoroughly sealed and exposed to sunlight, there will be no trouble in keeping the milk sweet, provided the proper low temperature is maintained.

The bacteria that cause souring multiply so rapidly at any degree of temperature above 60 or 70 that no person should expect to keep milk sweet unless they keep the temperature down to 60. There is no difficulty in handling milk in a cleanly way in clean vessels and at the temperature of well water. If milk sours at this temperature one may be very certain that there is a lack of cleanliness some where.

Men who handle milk resort to a great many schemes to make it seem sweet. It is easy to dope it with disinfectants which will kill the germs, such as formaldehyde or boric acid; but just to the extent that these are used, the digestibility of the milk is lessened and it is less fit for human food. The two great requisites in keeping milk sweet are absolute cleanliness and a low temperature—Wallace.

GOLDEN WEDDING

brand of silverware is guaranteed for 50 years; we carry a variety of patterns and designs. We also carry a full line of solid silverware. Our stock of silverware is larger than that carried by any other dealer in Roseburg. Will be glad to show you the latest patterns in silver.

J. T. BRYAN,
Watchmaker and Jeweler.

\$10 REWARD

For information leading to the whereabouts of Herman Shibley, last heard from was in Roseburg about ten years ago; at that time was engaged to some young lady in Roseburg. FRANK SHIBLEY, 1203 Sutter St., San Francisco, Cal. dsw

TO THE PUBLIC.

Any one who may be afflicted with any of the following diseases: Burns, piles, carbuncles, boils, eczema, erysipelas, blood poison, or any bad sore that has been sore for months or years, call on me any Saturday afternoon from 1 to 5 o'clock at The Herrington Home. No cure no pay. da27 JOHN EDICOTT.

For something special for dinners, parties or balls, see the Umpqua Bakery. Phone 2211. dtf

DEMAND FOR AUTOMOBILES.

Manufacturers Predict Enormous Output Within Year.

The estimate of General Manager Alfred Reeves, of the American Motor Car Manufacturers' Association, that plans for 1910 call for the production of 200,000 cars is suggestive of big things in the effect upon general trade. The output for 1909 will be 70,000 cars, so that if the estimate for 1910 is realized the increase will be phenomenal. Mr. Reeves states that the figures may not be reached, because it may be impossible for the builders to accomplish the feat, but he claims a sure increase of 125 per cent on the present year. The automobile business appears to be on a sound footing, says the Iron Age. Its organization has effected an agreement which precludes the possibility of disastrous losses due to unwarranted credits. Consequently, so radical an advance in production does not seem so dangerous as it would have been when competition included the giving of discounts to customers and the acceptance of their notes for a large part of the purchase price. Therefore, those of whom the automobile trade is a customer may look forward to the outcome with complacency. It is realized everywhere that with the present rate of production the automobile trade has been the best of all buyers in the machinery market for the last two years, and this affords the basis of some understanding of what the influence will be when the output is much more than doubled. The customer that proved a main support in dull times should occupy an equally conspicuous place in good times. The steady increase of manufacturing space and equipment must go on without interruption, not only among the automobile builders themselves, but with the makers of parts and accessories in myriad variety. The value of cars alone, averaging \$1200, will approach \$200,000,000, but the initial cost of a car is only the beginning of expenditures, which continue in the form of replacements, repairs, accessories and supplies. Practically all the automobile factories are building additions or otherwise providing for increased output.

SENSIBLE "CIVIL CALENDAR."

Scientific American: We have received from an advertising firm in San Francisco a copy of a proposed calendar, whose aim is to avoid the acknowledged drawbacks of the Gregorian calendar by substituting one that is better suited to the requirements of our day-by-day life. Although the Gregorian calendar dates from the year 1582, long before that many and various improvements had been suggested for conveniently dividing the 365 days of the year into weeks and months. Our correspondent asks: "Are we not again far enough advanced beyond the times of 1582 to adopt certain other changes?" and they offer a calendar which divides the 52 weeks of the year into 12 months, each having exactly 28 days. The first of January and the first of every one of the twelve succeeding months fall on a Sunday, and the 28th or last day of each month, therefore, falls on a Saturday. The obvious advantage of this arrangement is that, since each day of the week must be one of four numbers out of the 28 (Sunday for any month of the year being either the 1st, 8th, 15th, or 22nd; Tuesday either the 3rd, 10th, 17th, or 24th, etc.), if one knows the day of the week, it is possible to find the day of the month quickly and without reference to a calendar.

The additional month necessary under this system is named by its sponsors "Vincent," and it is placed in the calendar between June and July.

Thirteen months of 28 days each, however, give a total of only 364 days for the year, and to accommodate the odd day, it is proposed that between Saturday the last day of December, and Sunday, the first day of January, there should be a day to be known as "Anne Day." It is not recognized as a calendar day, and beyond its name, has no other distinction to separate it from the last day of December. Any labor done on Anne Day would have to be a matter of special contract or agreement. No interest or rental will accrue upon that day, and for all other purposes it would be considered a part of Saturday, December 28th. Leap Year is provided for by an extra day between Saturday Vincent 14th, and Sunday, Vincent 15th. This would be known as "Mid-Anne Day," and it would be treated in all respects similarly to Anne Day.

Although there can be no question of the simplicity and convenience of the proposed calendar, in respect of any prospect of its immediate and

world-wide adoption, we fear it must be classed with those two other great desiderables, the "metric system" and the "longer daylight day." We are not more firmly convinced of the advantages of this and those propositions for simplifying and rendering easier and more pleasant the round of daily life and its duties, than we are that to bring about these suggested improvements will take many years of arduous and persistent agitation.

PEACHES.

Good canning peaches, \$1 per bushel, if you call and get them at the orchard for the next few days. Curtis & Banfield, (old Stevens orchard, Edenhower.) Phone 1498. dtf

I build sidewalks, satisfaction guaranteed, prices reasonable. Leave orders at Roseburg Hotel. J. M. Divine. dtf

RESULTS OF BOOSTING.

Eugene's building improvements will run up into the hundreds of thousands of dollars this year, and may reach the million mark. And already there are many new structures in sight for 1910. The knockers on Eugene's future, if there are any, are singing pretty low now.—Guard.

CHIMNEY SWEEP.

This is my last visit here this fall. So clean your flues and chimneys now, while you can get them done for less than Portland prices. No muss in the house. 75c each flue. But you must leave your order at the Monogram Cigar Store at once. da19

Stop at The Fair and look at the beautiful enameled pictures, \$3.00 values for \$1.25. You will have to hurry; they are going fast; supply is limited. dtf

No Equals None Better None so Good

CHAMPION

MOWERS HAYRAKES BINDERS

We have just received a CAR LOAD of Harvesting machinery, direct from the Factory, and if you are going to buy a Mower, Hayrake or a Binder, call or write us for prices.

REMEMBER

Our stock of Farm Wagons, Buggies and Hacks is the largest in Southern Oregon, and we can suit you in style and price.

J. F. BARKER & CO.

Implements, Vehicles Phone 161 Roseburg Ore.



SERVE HIM A STEAK

sweet, tender and juicy and your husband will open up his heart and his pocketbook. Where will you get such a steak? Why right here, of course. We have the choicest meats in all the land. If you buy here once your husband will get good-natured immediately. If you buy here regularly he will be "Sunny Jim" all the time.

The Economy Market

Geo. Kohlhagen, Prop.

H. W. Althaus & Sons

Garage Automobiles, Bicycles and Supplies. Repair Shop

AGENCY FAIRBANKS-MORSE COMPANY

Phone 1441 - Cor. Cass & Rose Sts.

A Carload of FRUIT JARS

Our stock is the Largest and comprises the Best Makes

Economy, Mason's, Everlasting and Schram.

You should investigate this New Schram Jar, we believe it to be one of the best jars. Prices are the lowest. Send us your orders, we guarantee you satisfaction.

Roseburg Rochdale Co.