

VALUE OF WATER IN BUTTER

There must be a certain amount of water in butter to make it a perfect article—not that the per cent of water must come within certain fixed or narrow limits, but the amount that is present in butter made under normal conditions where quality is the main object.

To the average consumer the water content is not greatly noticeable unless there is a small quantity of free water left in the package in which the butter was originally packed. However, this free water bears no direct relation to the amount present in butter, but it is an indication of the plan followed in its manufacture.

Butter mechanically perfect may contain between 10 and 15 per cent of water. As a rule, this extreme difference cannot be detected except by men who have made the subject a study.

The value of butter is based on its quality and general makeup and not its natural composition, except in cases where it has been carried to an extreme.

The factors in composition that will affect its quality are the extremes in salt contents or whether the salt is all dissolved.

The limit which was placed upon the water to be incorporated into butter was in part to do away with the growing tendency on the part of some to make an article that should contain the lowest possible amount of butter fat and yet bear the name of butter. If this had not been checked there would have been danger of placing the ability of the buttermaker upon the question, "Can you get us the overrun?" In place of, "Can you make good butter?" It seems as if that idea is still encouraged in certain localities.

The overrun bears a certain relation to the composition of the butter, but is not a sure indication that a high per cent of water means a correspondingly high overrun.

A buttermaker should have an overrun that checks fairly well with the fat in his butter, provided the loss of fat in the process of manufacture has been kept at its minimum. It cannot always be said that an overrun of only 10 per cent is an indication of butter having a high fat content any more than a high overrun indicates low fat content butter.

The greatest factor in overrun control is the accurate determination of the total butter fat delivered to the creamery. If more butter fat was delivered than was actually paid for it cannot help but increase the overrun, and vice versa.

Naturally the question arises, "Can butter be made to always contain less than the legal 10 per cent limit for water?" The answer is positively "Yes," with a fair margin for safety. In fact, butter can be made to not exceed even a 15 per cent limit. A good commercial product can contain 14 to 15 per cent of water. This, added to the 82.5 per cent standard for fat, makes a total of 96.5 to 97.5 per cent, leaving a balance of 2.5 to 3.5 per cent for salt, casein and ash.

Since the average casein and ash content need not exceed 1 per cent, this leaves 1.5 to 2.5 per cent for salt. This amount of salt is not sufficient for all grades of butter, nor will it meet the demand of all consumers. In order to increase the salt content there must be a decrease in the water. A commercial product will pass to certain consumers containing 3.5 per cent salt, but need not exceed 3 per cent.

It is not safe to work too close to any standard because of variation in composition due to sampling. One sample of butter taken to represent a churning may or may not be an accurate representation of the butter in question. An average variation of at least one-half per cent must be allowed with an extreme of at least 1 per cent.

Testing Cream.

The percentage of fat in milk will have some effect upon the percentage of fat in the cream delivered by the separator. For example, when whey containing 1 to 2 per cent of fat is separated, unless the cream screw is changed, it will deliver a cream, if it may be called such, that will have to pass through the separator again before it can be churned, but just how much two creams will vary in test, one made from 5 per cent milk and the other from 4 per cent milk without changing the cream screw, we are unable to say, and we can find no data that will help us to answer this question exactly. It would be a very easy matter to determine just how much the two creams would vary in test by running some 4 and 5 per cent milk through a separator under the same conditions, then testing the two resulting creams.

Rations For Colts.

An experienced horseman has found equal parts of corn and oats ground together to be one of the best grain rations for growing colts. It furnishes elements needed for the production of fat, bone and muscle. Adding bran or linseed meal to the ration aids very much in keeping the bowels regular and avoids constipation and in this way lessens the liability of disease.

Cooling the Cream.

To cool the cream quickly and thoroughly just as soon as the separating is finished is of more importance than anything else at that particular time. The pigs and calves can wait for their skim milk, but bacteria in the cream favor to their growth is retarded.

A Mean Comparison.

"Confound these railway time tables," snapped Mr. Stubb as the long folder refused to remain closed long enough for him to place it in his pocket. "They remind me of a woman." "The idea!" replied his wife in surprise. "What is the comparison?" "Why, they are hard to understand, and you can't get them to shut up."

An Old Story.

Doctor—I shall have to forbid you smoking, drinking and staying out late nights. Patient—Oh, doctor, be original. My wife's done that already.—Boston Transcript.

COAL TAR IN ROADMAKING.

Similar to Asphalt Pavement, but of a More Resilient Character.

Revolution in highway construction is predicted by many road engineers, but many others believe the successful macadam method modified will be the only innovation. In that event the tar macadam method will surely be considered. A properly tarred road is similar to an asphalt pavement, but of a more resilient character. The stone is all bound together by the tar into a smooth, firm surface, which can be swept and washed in much the same manner as an asphalt pavement.

The main agencies which cause deterioration of tarred or oiled surfaces are heavy rain, frost and the decaying organic matter which accumulates on the surface of the road. So far as can be determined, one kind of road withstands the action of these agencies as well as the other. Water gas tar is used in connection with coal tar, but not to any great extent by itself. It has a greater power of penetration, and less of it is required, but it is not so lasting. It really is in a class by itself and occupies an intermediate position between the temporary and the permanent binders.

In some cases where a limited amount of money is available or where



USING ROLLER ON COAL TAR ROAD.

(From Good Roads Magazine, New York.) For climatic reasons it is available to treat the road with the idea of its lasting only through one season water gas tar is expected to prove a valuable dust layer, and any extension of its use is thought to be in this direction. The value of coal tar in the preservation of macadam roads and as a dust preventive is proved by the fact that in the majority of cases the life of a treated road has been materially lengthened, and by applying tar the complete rebuilding of many roads at an enormous expense has been avoided.

A great drawback in the standardization of tar treatment is the impossibility of securing a uniform supply of coal tar. Coal tar is purely a by-product, and the processes by which it is derived are never run with reference to the quality of tar produced, but solely to obtain maximum yields of gas or coke.

A Proud Prerogative.
"When can a boy be said to have arrived at man's estate?"
"When he begins giving his old clothes to his father."—St. Louis Republic.

sy to deceive oneself as it to deceive others.—Roche-

The White House Hotel

CULVER JUNCTION

Is a strictly First Class Hotel and solicits your patronage when visiting Central Oregon.

Home Cooking and Neat Clean Service.

Meals served at all hours for transient guests. Special attention given to automobile, stage and all through passengers as well as local.

Culver Junction is 55 miles out from Shaniko at the Hill and Harriman railroad junction and on the most direct and best automobile road between Madras and Bend.

Stop and dine with us and watch this new railroad town grow.

Mrs. M. H. Fosdick, Prop.
Culver Junction, Oregon. 10-29

A Whole Section

640 Acres 120 acres in cultivation; 520 acres can be put in grain; 200 springs sufficient to irrigate 300 acres; all under fence; fair buildings; small fruits; four miles from Prineville.

\$12.50 per Acre for 10 days

M. E. BRINK, Prineville, Oregon

Drop in and See

Champ Smith

DEALER IN

Soft Drinks

of all kinds

Imported and Domestic

Cigars

At the old Smith & Cleck stand, Main street, two doors south First National Bank

Notice to Electric Current Users.

On and after October 1st, 1910, we will charge eight cents per kilowatt-hour for all lights that are not burning all night. At present we charge four cents per kilowatt-hour for residential lights, but we do not agree to furnish all-night lights in residences, without their being in special use. Current is maintained to residences of fuel for steam, and by letting your lights burn when not in actual use is a waste of your light bill is larger than usual you will know the reason why.

PRINEVILLE LIGHT & WATER CO.
Per C. L. Slatton, Sup.

Agreement Dissolving Partnership.

Know all men by these presents: That the partnership heretofore existing between J. T. Houston and George E. Bates, under the firm name of Houston & Bates, has been by mutual consent dissolved. The said J. T. Houston hereby assumes all outstanding liabilities of said former partnership, and receives as his individual property all assets and property of said former partnership. All persons concerned are hereby notified of the dissolution of said partnership.

Dated this 15th day of November, 1910.
G. W. BATES,
J. T. HOUSTON.

Situation Wanted.

Competent office man, book-keeper and stenographer wants position, whole or part time, temporary or permanent. Reasonable salary. J. S. Fox, P. O. Box 1, Prineville, Oregon. 11-10-11

Express Delivery.

Am running an express wagon and will guarantee prompt delivery to all parts of the city. Pianos and household goods a specialty. V. M. White. 10-13

Horses for Sale.

Broken and unbroken mares and geldings for sale at my ranch at Bear creek. T. J. FERGUSON, Roberts, Oregon. 8-11-11

Now is the time to get Christmas cakes ordered. Plain loaf, or almond-loaf. Dorothy Fox, Prineville, Oregon. nov. 3-10

Purse Lost

Between candy kitchen and J. H. Wiggle's residence, a small brown purse containing a \$5 bill, loose change and P. O. Key. Reward for leaving at this office. 11-17-11

Perfection Oil Heaters

The W. F. King Company have recently received a stock of Perfection Oil Heaters. They are just the thing for a bath room or bed room. 11-17-11

Money to Lend.

Money to loan. Address P. O. Box 302. 11-10-11

Timber Claim for Sale

Timber claim for sale in Crook county. Sec. 4, township 14 south, range 18 east with 2,425,000 feet of first class yellow pine. For particulars write G. C. Keel 1828 1st Ave. Spokane, Wash. 11-17-11

For Sale.

Both alfalfa and grain hay for sale at the J. O. Powell place, near town, to feed beef cattle that are being driven to market. Thos. Stroud & Cross, either phone, or call at the ranch. 7-14-11

Deal at Home.

Why do you throw your money away dealing with traveling men? Dr. Curtis eye sight specialist will fit you with glasses, guarantee them in every respect, and make all the necessary changes for one year. Room 14 and 15, post office building. 11-17

Mare Lost.

Lost from Keate's Feed Yard Oct. 21, a black saddle mare weighing about 1000, seven or eight years old, and shod. Branded wagon iron 5 connected on the stifle and 4J connected on the left houlder. Will finder please notify John R. Jones, Prineville, Ore. 11-10-11

Hillman, Oregon, Crook County.

To the People of Crook County:--

We are glad to announce to the public that HILLMAN is growing every day and the prospects were never BETTER for a CITY than at the present. We have a location here second to none in this country for a CITY. The largest area of productive land in the Deschutes Valley surrounds

HILLMAN,

Making this one of the largest trading and shipping points on the Oregon Trunk Railroad. The railroad has graded large yards here to handle the large quantity of freight that will naturally accumulate at this point.

The Depot Sight is Graded.

We have just completed the largest and finest well in the Deschutes Valley, having

40 Feet of Pure Water,

And the pumping of 12 gallons per minute has no effect on lowering it, showing that the flow is rapid. Hillman has a natural drainage in fact everything that tends to make a healthful City. Don't take our word for it, Come and See for Yourself, we are on the ground to Show You.

Splendid Business Opportunities

On Small Capital. See us before buying. Fine Accommodations here. Two Feed Barns and Hotel.

Hillman Townsite Co.,

Hillman, Oregon.

Just Received

Carpets, Art Squares Rugs

UNIVERSAL RANGES

America's Best Make

A. H. LIPPMAN & CO.

Wood Sawing.

Beginning November 1, I will be prepared to saw wood on short notice. Phone to my residence. H. L. Horns. 10-20-11

Corset Found.

The first day of September, between Dave and John Grimes. Call at this office. 10-29-11

For Sale Cheap.

Good team, wagon and harness for sale cheap. Inquire at this office. 10-29-11

For Sale.

Cream Separator, one John Deere Salks' Plover, Superior Windmill top, new. Bargains. Apply to JONES MARRISON, Prineville, Oregon. 10-20-11

Relinquishment for Sale.

Relinquishment 160 acres for sale cheap. Has fine spring and 30 acre cleared, 15 miles from Prineville. \$200 cash if taken at once. Bx. 341, Prineville, Oregon. 10-20-11

Brown Leghorn Cockerels (1st and 2nd prize winners) for sale, at \$1.00 each. B. F. Wilhoit, Prineville, Or. 11-21

Notice to Creditors.

Notice is hereby given by the undersigned, the administratrix of the estate of James H. Messinger, deceased, to the creditors of and all others having claims against said deceased to present them with the proper vouchers to the undersigned at the office of M. H. Elliott, in Prineville, Oregon, within six months from the date of this notice. Dated this 20th day of Sept. 1910. L. L. E. MESSINGER, Administratrix of the Estate of James H. Messinger, deceased. 9-20

Good Winter Apples for Sale.

N. E. Vaughan's Orchard, 5 miles northwest of Mitchell, Oregon. 1 mo

Clifton & Cornett's Big Department Store



IT is not the simplest thing in the world to dress smartly, even though the clothes you wear are smartly styled.

It is not always the chap with the most expensive clothes who looks most classy.

It is not the pattern nor the style of a suit which makes that suit good and true.

These are old truths which we cannot dispute. We have made it our special business to help you dress smartly, even though you sometimes feel that you will never appear as well dressed as the other fellow.

It is not necessarily the most expensive clothes that lend the most grace to a fellow's figure. Becoming style in a satisfactory quality will do as well if not better.

When you look at clothes seek Style, Fabric and Fit. Take a careful look at "Modern Clothes," designed and made by Brandegee, Kincaid & Co. You are sure to find in them many things you have wanted but have not been able to obtain.

CLIFTON & CORNETT,

Prineville, Oregon.

Theo. R. Herkner, Redmond Harness & Saddlery

I carry a full line of the best Hand-made Team Harness and Strap-Work always on hand. The very best of California oak-tanned leather is used in my manufactures. Also Collars, Blankets, Whips, etc. Prices Reasonable, quality considered. My work is absolutely guaranteed.

Theo. R. Herkner, Redmond, Or

City Meat Market

Horigan & Reinke, Props

Beef, Pork, Mutton, Wholesale and Retail

All Kinds of Sausage Nice and Fresh

Home Cured Bacon and Lard. Fish and Poultry in Season.

Butter and Eggs. Give us a call and we will save you money.

General Blacksmithing

HORSESHOEING, WOOD WORK, ETC., NEATLY AND PROMPTLY DONE WHEN IT IS DONE BY : : :

Robert Moore

Satisfaction Will Be Guaranteed

PRINEVILLE, OREGON.