

film is suitable for transmission. The apparatus is designed to transmit a picture five by seven inches in a little less than five minutes and the picture is received in such form that after photographic development of the usual sort it is ready for newspaper or other reproduction. As films can be used for transmission while still wet the system eliminates any delay due to drying.

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SIMPLE SCIENCE

By WOW

BUTTER

Among edibles cows may not seem to possess as many lines of beauty as some others, but they are beautifuler than pigs. Pigs are a complaining class also whereas cows are more philosophical and even tempered, which is a great aid to the development of grace, poise and beauty of form. Cow language again, although at times a bit too strong for city use, is accommodated quite nicely in the wide open spaces of the country.

Whatever cows may lack in beauty of form and language they make up in beauty of usefulness. Pigs come next. Cow and pig meat are easily first and second prize. Then again milk comes from cows and butter comes from milk. What is more charming than a pot of lovely fresh yellow country butter.

Butter is usually made in a dairy. This word is derived from the old English word "dey", which meant a farm maid-servant, because it was she who used to churn the butter. In the present servantless days it is made either by the wife or by machinery and the dairy may be the back porch, if the flies are not too bad, or the cellar or the factory.

Butter fat occurs in milk in the form of very small round globules which do not stick together unless rather violently shaken. They stick together the most readily if the temperature is between 56 and 62 degrees. The churning should be done slowly at first, then more rapidly and finally slowly again. Real expert buttermakers find no difficulty in the work but amateurs often find the problem very exasperating and very trying on the language.

Poor butter is usually caused by two conditions. It may be due to the presence of the wrong kind of bacteria which gain admittance when the cream is not kept in a clean place, or is kept at the wrong temperature. Buttermakers of good reputation nowadays cultivate lactic acid bacteria which they call a starter, and they impregnate the cream with them, thus developing a nice flavor in the butter. Then again if the buttermilk is not thoroughly washed out the butter retains too much of the casein, which tends to cause rancidity. Butter usually contains about 85 per cent, of fat, from 10 to 15 per cent, of water, a little casein, milk sugar, salt, etc.

Some butter is firm, other butter is infirm. Some is renovated, some needs it. Some is greasy and some is streaky. Some is yellow from June grass, some from yellow eyes, but most of it is useful for lengthening lives.

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