of a varnish for the eggs much better than any resinous gum, as it can be easily removed by washing either in warm or cold water, besides it is much cheaper. Eggs preserved in this manner will keep any length of time, as the bed of charcoal from its porous nature, is fron-conductor of heat, and consequently maintains around the eggs a uniform temperature—preventing them from suffering from alternations of heat and cold, when they are removed from one climate to another. This method is said to be infinitely better than greasing them, for when the grease becomes rancid it hastens or promotes putrefaction of the animal matter in the egg.

The gum Arabic may be applied as follows:

—Take equal quantities of gum Arabic and water; when the gum is dissolved, coat the egg with a soft brush. When this coating is dry, add another coat, and the eggs will keep fresh sill wanted.

A German chemist had discovered an easy mode of preserving for six years, or probably for a longer period, eggs perfectly fresh and fit to eat. All that is necessary is to put fresh laid eggs into a bottle with a large mouth and short neck, and fill it will lime-water.

The way to make lime-water is as follows; —Throw into a vessel containing ten or fifteen quarts of water, five or six lbs. of unslaked lime, shake it well several times, then let the lime settle and pour off the water, which is perfectly limpid, although it has dissolved a portion of the lime. To make sure of its being saturated with the lime, after having filled the bottle containing the eggs until the water is about three inches above them, adva small quantity of quick-lime to close the bottle.

## SCIENTIFIC MODE OF BOILING MEAT.

When animals are newly killed, there is an acid secretion in their flesh which turns blue litmus paper red, and which renders their flesh easy of digestion, if it be eaten immediately. In a few hours, however, this acid evaporates, and the meat becomes hard and difficult of digestion, till it has been softened by cookery, or kept sufficiently long to have become tender from the process of decomposition having commenced. In Liebig's recently published work on the "Chemistry of human Food," we are told that boiling flesh slowly effects a chemical change in its composition; and, according to the length of time employed in boiling, and the amount of water used, there takes place a more or less perfect separation of the soluble from the insoluble constituents of flesh: the water or soup in which the flesh has been boiled, containing the soluble matter, and the bouilli or meat from which the soup was made, consisting chiefly of fibrous insoluble matter, nearly useless as nourishing food. Thus it is obvious that when the water in which the meat has been boiled slowly is thrown away, by far the greater part of the soluble or nutritious matter is wasted. A very different mode of cooking should be adopted when it is wished to eat the meat. The muscular fibre of flesh in its natural state is everywhere surrounded by a liquid containing dissolved albumen.

When this is removed by boiling with water. the muscular fibre becomes hard and horny, and this hardness increases the longer it is boiled. "It is obvious, therefore," observes Liebig, "that the tenderness of boiled meat depends upon the quantity of albumon deposited between the fibres, and there coagulating; for the contraction or hardening of the fibres is thereby, to a certain extent, prevented. If the flesh intended to be eaten be introduced into the boiler when the water is in a state of brisk ebullition, and if the boiling be kept up for some minutes, and then so much cold water added as to reduce the temperature of the water to 158°, the whole being kept at this temperature for some hours, all the conditions are united which give to the flesh the qualities best adapted to its use as food. When it is introduced into the boiling water, the albumen immediately coagulates from the surface inwards, and in this state forms a crust or shell, which no longer permits the external water to penetrate into the interior of the mass of flesh. But the temperature is gradually transmitted to the interior, and there effects the conversion of the raw flesh into the state of boiled meat. The flesh retains its juiciness, and is quite as agreeable to the taste as it can be made by roasting; for the chief part of the sapid constitutents of the mass is retained under these circumstances, in the flesh."

## WORKING BUTTER.

Every one knows that to make good butter, and that will keep well, all the buttermilk must be worked out. It should be worked first, when freshly taken from the churn; then salted with the purest salt, one ounce to a pound of butter; then allowed to stand 15 to 20 hours; then worked till the brine runs from it clear, and then packed. In working, the butter should be cut and pressed, but not rubbed or spread, which injures the grain of texture. Good butter is made both by washing, and by not washing—but as a general rule, cold water is beneficial when the butter has come soft and light colored.

## CHURNS-AND WORKING THEM.

The best churn is the thermometer churn, because it gives complete control of the tem-perature. But the old churn with vertical dasher, being the simplest, has advantages over all others; and by care in examining the cream with a thermometer, and tempering by the means already described, it does well. It should never be worked by hand— this is too laborious, and time is too valuable. Horse power is good for large dairies, or where the milk is churned; water power is apt to fail in the dry part of summer, when most needed, and it is expensive to keep the machinery always in repair. It is expensive keeping a large dog for churning, and such an animal is often a great nuisance. H. Olmstead, of Delaware county, N. Y., a skillful dairyman, prefers a large sheep, (large coarse wool breed,) and states that it will churn three times a day without inconvenience-will churn the butter for 20 cows-costs much less to keep than a dog