

proper time—is not only safe, but frequently beneficial. With Huyler's best, however, at 80 cents per pound, and confectioners' sugar only 10 cents, it needs no great mathematician to figure out that she who "has a frugal mind" had best become her own confectioner. Nor is this a difficult task. With a clean skillet or bright basin on the kitchen range, or with the chafing dish on the dining table, with "gumption" and foresight in having materials prepared and at hand, a varied store of sweets may be prepared that will be vastly to the credit of the amateur confectioner. A few of the points to bear in mind in making home-made candy are that the finest granulated sugar is preferable for cooked candies; that Porto Rico molasses and light, clean, brown sugar, with no strong or woody taste, are the requisites for caramels or molasses candy; that cream should always be used in preference to milk or, failing that, butter. That cream, butter and flavoring should be added after the candy is taken from the fire, or the richness will be lost; that fruit juices—strawberry, pineapple, lemon and orange, make the best flavoring; and that vegetable colorings are to be preferred. That blood beets give a dark red color, and cranberry juice a delicate pink. That fresh spinach, cut in alcohol and allowed to stand for a day, gives a beautiful green, and the yolk of an egg, or raw, grated carrot juice furnishes a rich yellow.

That a vanilla pod from the druggist's will not cost more than twenty-five cents, and will furnish a much better extract, at much less price, than any vanilla extract you can buy. That the way to prepare it is to soak it in deodorized grape spirit in a dark closet for three weeks before using, allowing one teaspoonful powdered bean to two ounces of spirit, and lastly that it is the finishing touches that make the difference between dainty, inviting bonbons and crude, untidy lumps of sweetness that betray the careless amateur. An excellent rule for the fondant, which is the foundation of the delicious French creams, is thus given by Miss Lucy Andrews: "To every cup of sugar allow half as much water and one-eighth teaspoonful cream tartar, to change the chemical nature of the sugar so it will not granulate. Cook in a round-bottomed bowl, if possible, and cover to prevent having to wash the sides afterward. Boll to a soft ball. Test, and as soon as a bit dropped into cold water will fold together it is done." It is better in any case, that it be underdone rather than over. This may be flavored with fruits, nuts or raisins. It keeps well, and may be left in a covered jar for weeks. When ready to use, take out a portion at a time, and add fruits, grated cocoanut, dates, almonds, or whatever is desired, to the creamed mixture. The peppermint sweets which are so popular as a bon bouche to go with the after-dinner cup of coffee, are made by melting a portion of the fondant in a double boiler, adding a little peppermint and beating to a cream. Drop the mixture from the point of a spoon in little spots about the size of a dime on oiled paper and let them harden. If desirable, these may yet again be metamorphosed into chocolate peppermint, by dropping in melted chocolate, lifting out carefully with a fork, and placing on oiled paper to dry.

"Buttercups" are welcomed by both young and old. Molasses candy is first made by boiling together two cups of Porto Rico molasses, one cup of white sugar, three-quarters of a cup of water, one tablespoonful (rounded) of butter, and one-half tea-

spoonful cream tartar to prevent granulating. Do not stir, and as soon as the syrup begins to boil, cover with a lid. When the candy is cooked sufficiently it will form into thick globules when dipped in cold water. Remove from the fire, pour on an oiled marble or platter, and as soon as cool enough to handle begin to pull. The candy should be rather sticky at first, else it will not be of the right consistency when done. As soon as it gets so it can be easily handled, hold over the stove, pull briskly, and it will begin to whiten. Now place on the slightly floured moulding board, and stretch out into a long narrow shape. Lay in the center of this a fondant, roll over, pull out into sticks about three-quarters of an inch in diameter and cut off in inch pieces with a pair of shears. Lay the pieces as cut on an oiled paper or floured plate. These "buttercups," properly made, should be brittle at first, but rapidly melt in the mouth.

Another rule for chocolate caramels calls for one cup Porto Rico molasses and one heaping cup of brown sugar. Boll very slowly as it is stringy as it falls from the spoon—about fifteen or twenty minutes. Add two squares grated chocolate, and simmer five minutes. Remove from fire, add one tablespoonful thick cream or one dessert spoonful butter. Flavor with cinnamon or vanilla, turn into buttered tins, and mark off with squares before the mixture becomes cold.

An experienced candymaker says due regard must be had to the state of the air for candy making. On a damp, moist or rainy day, when the air is full moisture, syrup will not evaporate or candy harden well. For the same reason it is not wise to have anything on the stove that will throw off steam when sugar is cooking for fondant.

The question of "how much water should we drink," is referred to by the "Journal of Hygiene" to our instincts, with the assurance that they can tell us much better than any hard or fixed rule. "For ages," says the liberal writer, "our instinct have been acquiring a knowledge of how much to drink, and transmitting that knowledge to descendants; and if we follow them we shall not go far out of the way. It is of more use to us to know that pure water is essential, and that impure water is one of the most dangerous drinks than to know how much of it is required daily. If one lives in a region where the water is bad, it should be boiled and put away in bottles, well-corked, in an ice-chest, and in addition one should eat all the fruit one can, if fruit agrees—as fruits contain not only pure water, but the salts which are needed to carry on healthfully the functions of life.

The glint of brass brightens all the windows of the housefurnishing stores these days, for brass is emphatically this season's favorite metal. Tables, brackets, frames, cabinets, desk furnishings, screens, even portieres and hangings, glitter with an almost barbaric prodigality of this brave metal, and those whilom favorites—Dresden china, marquetry, sterling silver and old tapestries—may as well veil their faces till the reign of brass is accomplished.

"Pigs in blankets" are again in favor for luncheon or supper. They may be prepared in the chafing dish or on the kitchen range, as fancy dictates. Take a dozen plump oysters, wipe carefully, salt and pepper. Cut some fat bacon in very thin strips, wrap each oyster in a strip of bacon, and pin with a wooden toothpick. Have the frying-pan hot, and fry until the bacon is

crisp and brown. Serve hot on toast and give thanks.

EMMA PADDOCK TELFORD.

### SCIENTIFIC MI CELLANY

An interesting discovery by Jacquemin is that the leaves of fruit trees, having themselves no marked flavor, may develop a decided bouquet of the fruit in solutions undergoing alcoholic fermentation. Pear and apple leaves, for instance, placed in a ten per cent solution of sugar, with the addition of pure yeast, imparted to the fermented product a strong odor and excellent flavor, which became even more marked in the alcoholic distillate. A similar effect was had with leaves of the grape-vine. Leaves from trees having fruits near maturity gave the most decided results, from which is drawn the important inference that fruit flavors are due to a body—possibly glucosidal in character—elaborated in the leaves, and transferred to the fruits only as the latter approach maturity, developing distinctive flavors when acted upon by the special ferments of the fruit juices.

A new mechanical movement, the idea of Mr. E. M. Bowden of London, consists of a stout inner wire surrounded by a close coil of another wire, the inner wire projecting beyond the other at each end and having the projecting ends passed through holes too small for the passage of the coil. On pulling the inner wire out of the coil at one end it is drawn in at the other. Power may be thus transmitted around corners or between points not fixed, the flexible conductor of motion working hanging loosely and even tied in a knot. The mechanism was designed at first to operate a bicycle brake.

A safe narcotic has been sought in the hospitals for insane women in the City of Mexico. A simple product from the seeds of the white zapote has proven more satisfactory than anything previously tried, as it produces a tranquil sleep, while deaths from cerebral congestion have ceased since its use was begun.

Not less than thirteen comets of short period are due to return to perihelion within the next two years, but several of them will be likely to escape observation.

It is computed that the star 1830 Groombridge is moving through space at a speed of more than 200 miles per second, this computation being based on the star's parallax and the large proper motion—or change of place in the heavens as seen from the earth—of seven seconds of arc per annum. This is a most enormous velocity, beside which the rifle-ball's flight is but as a snail's pace, is a perplexing problem. Considering the universe to have such an extent that light—at the rate of 186,000 miles per second—would take 30,000 years to cross it, and that it contains 100,000,000 stars of an average mass equal to five times that of our own sun, Prof. Simon Newcomb finds that its gravitational attraction would give a velocity of only twenty-five miles per second in drawing this star from infinity to the center of the systems of the universe. This is but an eighth of what the velocity appears in reality to be. Prof. Newcomb is thus forced to conclude that either the bodies of our universe are more massive and numerous than telescope examination would seem to indicate, or 1830 Groombridge is a runaway star, flying on a boundless course through infinite space with such momentum that the attraction of all the bodies of the universe can never stop it. In a recent investigation, Mr. Luigi d'Auria has sought to throw light on the matter by assuming that the force has been