

DOMESTIC ECONOMY.

Honey from fruits: Our honey crop is short this year, and I have already begun to put up fruit syrups which I think are even more delicious with waffles and other breakfast cakes. This year I have made them in a little different manner from my former practice. I dissolved five lbs. of granulated sugar in sufficient water to cover it, let it come to a boil and set it away until cold. This is then poured over 10 lbs. of freshly gathered raspberries or strawberries and kept in a closely covered vessel for 24 hours. The syrup, which has extracted the aroma with the finer juices of the fruit, is then drained through a fine sieve or strainer, without pressure, and boiled again, care being taken to skim it well. Five minutes' boiling will make it rosy if the fruit is at the proper condition of ripeness; every housekeeper knows how to test the consistency of jellies, and this compound is simply a jelly "arrested in its development." It should be bottled and sealed as soon as it cools. The pulp which remains, with the addition of a little more sugar, makes a good plain jam.

Squeeze the juice of one lime into a tumbler, add two tablespoonfuls of the syrup, fill up with water, and a delicious drink is the result.

Peaches make the richest fruit syrup for cakes. Quinces and grapes, especially Delaware grapes, are very delicate in this form. If peaches are used, the syrup should be boiled longer and to a greater consistence before bottling.

Fruit Syrup Pudding: I invented a pudding for four persons, last week, which proved very acceptable, viz: To one large cup of sifted breadcrumbs or rolled crackers add a salt spoon of salt, well stirred in. Add a cup full of any of the above mentioned syrups, which the crumbs will absorb. Melt a tablespoonful of butter in two cups of sweet milk, and add to this when cool the beaten yolks of two eggs. Stir into this custard mixture the syruped crumbs, and bake in a shallow pudding or deep pie dish. When nearly done, make a meringue of the whites of the eggs and sugar, spread over the pudding, return to the oven long enough to "set," and serve cold.

Lima Bean Soup: Boil a pint of lima beans until soft enough to be beaten to a smooth paste with a potato masher. Stir into this paste two quarts of hot soup stock of any kind, and let it come to a boil. (The jelly which is left after boiling a ham may be used if not too salt.) Stock from beef or mutton makes a more delicate soup. Use a trifle of cayenne in the seasoning. Serve with sippets of toasted bread.

TO WASH LACE.—Mix a teaspoon of powdered borax in a basin of strong white castile soapuds. Baste the lace to be washed very carefully with fine thread upon two thicknesses of flannel. Soak the lace thus arranged in the suds mixture 24 hours or longer if very dirty, changing the suds two or three times. Then let it lie a couple of hours in clean water to rinse, changing the water once. Squeeze it out (do not wring it), and when partially dry place the flannel, with the lace on it, lace downward, on two thicknesses of dry flannel laid on a table, and smooth it with a hot iron. When the lace is quite dry rip it off. Its considerable trouble, but the lace looks beautiful.

GINGER SNAPS.—Two cups of molasses, one cup of butter, one tablespoonful of ginger, two teaspoonfuls of soda dissolved in a little hot water; put the ingredients together, warm them in cold weather, then stir in as much flour as possible, but do not knead; pinch off pieces the size of a marble and place on tins, with space enough between to allow them to spread without touching each other. After baking, let them stand on the tins a few minutes to crisp.

A MEDICATED PILLOW has been devised, containing receptacles filled with inhalent mixtures suited to different cases, as of headache, bronchitis, catarrh, etc., the fumes of which may be breathed at night, and for which much is claimed.

STORED ELECTRICITY.

An exceedingly long step from the theoretical to the practical was made when that "box of electricity" was sent from France to England. Many years have the scientific men of all countries been theorizing on the application of electricity to the purposes of every day life, aside from the important ones of telegraphing, lighting, etc. Above all things was it wanted for a motor, and now it seems, suddenly, this application is made. The box was sent to Glasgow, to Sir Wm. Thomson, having been stated to have been charged at Paris with a store of active electric energy to the amount of 1,000,000 foot-lbs. It consisted of four of Faure's batteries charged with electricity from an ordinary Grove's battery. The four batteries were enclosed in a wooden box, about a cubic foot in measurement, and weighed about 75 lbs. Sir Wm. Thomson now makes the important announcement that all that has been stated has been more than borne out by experiment. No appreciable loss could be ascertained to have occurred during the delay from transit and until the stored energy was applied to working purposes in Glasgow. One battery was detached from the other and carried to another place to supply the force for an electric cautery; and a single battery, after having been left alone for ten days, yielded to Sir Wm. Thomson 260,000 foot lbs., being some 10,000 above the original estimate. The first result Sir Wm. Thomson looks for is the use of Faure's batteries in private houses, as reservoirs of electricity for domestic purposes, such as lighting, heating, the driving of sewing machines, and many other objects.

We obtain electricity from the atmosphere by simple mechanical means, the principal expenditure being for power. Now, with a means of storing electricity, we store power; for it can be generated by wind, by running streams, etc., and saved for use when required. We thus chain up powers hitherto free from more than a passing restraint. The cost of storage does not seem to be material in this application.

Of the hundreds of ways in which this power can be utilized, it is useless to speak. Already a tricycle weighing 400 lbs., has been propelled along the streets for an hour and a half continuously. This one practical experiment points out the way to thousands of applications.

TAPPING EAGLE LAKE.—The tapping of Eagle lake, in Lassen county, is an enterprise that bids fair now to become accomplished, and will be one of vast interest to the county. This enterprise, which will require the running of some 9,000 ft. of tunnel, or open a cut and a flume 17 miles long, will irrigate and open up for settlement about 100,000 acres of as fine agricultural land as there is in this valley, but which now is almost worthless, being covered with a growth of sagebrush. The parties interested in this project are known to have plenty of money, and will doubtless prosecute the work to completion. They will not be obliged to look to irrigation alone for dividends, as the lake has on its borders a vast supply of excellent timber, which can be floated down their flume with ease. The company have now on the ground engineers who have made the necessary surveys, and are now sinking shafts along the line of the proposed tunnel to test the ground to be encountered, and which thus far is much more favorable than expected.

TO UPHOLSTERY BUYERS.—Here is a practical hint to upholstery buyers. M. Chevreul is making known a new series of observations on the vision of colors. Any eye which has looked at red for a long time becomes blind to green, and is disposed to see everything red; a little while after, it becomes blind to red and sees everything green. It is for this reason that a buyer after examining a series of pieces of red cloth, finds the last less pleasing than the first. A seller would prevent this by placing before his customer some green cloth on which the buyer's eyes might occasionally rest.

THE HAMMER.

Taking as its text the ancient legend of the Mechanics' Associations, "By hammer and hand, all arts do stand," the *Economist* pays the following glowing tribute to this implement of industry:

The hammer is the universal emblem of mechanics—those skilled in uniting and binding together of materials. With the hammer are alike forged the glittering sword of contention, and the dusty plowshare of peaceful agriculture. Its workmanship ornaments the trapping of war, and nails the olive branch of peace above the gate. In ancient warfare it stood pre-eminent, apart from the instruments it wrought and formed. The old battering-ram of the Greeks was nothing but the rude conception of a huge hammer. In heathen mythology it was always the symbol of might and strength. It was the sole weapon of the dreaded god of thunder, Thor, the mighty rival of Odin. His hammer was fashioned by cunning dwarfs, and possessed the wonderful property of returning to his hand after being hurled. To the heathen of Teutons the sign of the hammer was analogous to that of the golden cross of Christianity. In the hammer lies the wealth of a nation. By it are forged the ponderous engines that almost shake the world, and the tiny needle which unites alike the costly silks and satins of a queen, and the rough homespun of a laborer.

The hammer, too, is no partisan. It is an instrument of the savage and the civilized. Its merry clink points out the abode of industry and labor. Its handle if extended, inviting all to grasp, and with its unyielding head, by the help of a strong arm, forges happiness and prosperity. It is, in fact, a domestic deity presiding over the aspirations of wealth and ambition. Not a stick is pointed, not a house is built, a ship floats, or a carriage rolls, or a wheel spins or an engine thunders; not a press speaks or a bugle peals, a spade delves or a banner floats, without having endured the blows of the hammer. So it instructs and teaches us that great ends and large results can only be accomplished by good, hard, vigorous blows. That if we would attain usefulness, and reach the full perfection of what we are capable of becoming, we must not shrink back from the hardships, buffetings and hard knocks of life, but early learn to cultivate the power of patient endurance.

ABSORPTION OF THE SUN'S RAYS BY THE CARBONIC ACID OF THE ATMOSPHERE.—H. Ernst Lecher, by means of observations with a thermo-electrical apparatus in connection with observations with a pyrheliometer, arrives at the conclusion that the amount of carbonic acid which has been proved to exist in the air is sufficient to cause the absorption which has generally been attributed to aqueous vapor alone. He believes also that his method is better adapted for obtaining the amount of carbonic acid in different layers of the atmosphere than the chemical methods hitherto adapted. — *Annal. der Phys. u. Chem.*

SPEAKING TUBES NOT A MODERN INVENTION.—There can be but little doubt that speaking tubes were used by the ancient Romans. The Rev. John Bruce says they ran along the whole length of the great wall which surrounded the city. An early English poet alludes to them as follows, as quoted by Mr. Bruce:

"Towers stood upon my length, where garrisons were laid
Their limits to defend; and for my greater aid
With towers I was built, where sentinels plac'd
To watch upon the Pier; to see my makers' crew'd
With hollow pipes of brass, along me still they went,
By which they in one fort still to another sent
By speaking in the same to tell them what to do,
And see from sea to sea could I be whispered through."

SHINGLE ROOFS.—Shingles are made more durable and less liable to ignite from sparks when subjected to the following treatment: Water, one gallon; chloride of zinc, one-half lb.; digest in this the wood for 48 hours, drain, and put into a solution of crude tungstate of soda one lb., water, one gallon (hot), for three hours; then dry.