

THE FARMER'S DAUGHTER.

There is a world of beauty flourishing in the shades of the country that people in the town never dream of. Farm houses are dangerous places for such fellows as cheerful Tom, Bachelor Bob, and Orphan Boy. As you are thinking only of sheep or herds of cattle, you may be shot through by a pair of bright eyes, and melted away by a bewitching smile that you never dreamed of till the mischief is done. In towns and theaters, and thronged assemblies of titled fair, you are on your guard, you know what you are exposed to, and put on your breastplate, and pass on through the most terrible onslaught of beauty, safe and sound. But in the sylvan retreats, dreaming of nightingales and blue-birds and all such, and hearing only the lowing of cattle, you are taken by surprise. Out steps a fair, blue-eyed creature, crosses a brook, leaps a stile. You start, you stand lost in wonder and admiration! You take out your memorandum to write a sonnet on the return of the nymphs and Dryads to earth, when up comes John Tompkins and says: "it's only the farmer's daughter who lives on yonder hill." What! have farmers such daughters now-a-days? Those farm houses are dangerous places, so keep away from them. Let no man with a poetical imagination, which is only another name for a tender heart, flatter himself with the fancies of the calm delights of the country; with the serene idea of sitting with the farmer in his old-fashioned chimney-corner, and hearing him talk of corn and mutton, pork and potatoes, and all such things; of joining him in the pensive pleasures of pipe and jug; of listening to the gossip of the comfortable farmer's wife, of the parson and his family, of his sermons, and his pigs, over a fragrant cup of young hyson or wrapped in the delicious luxuries of custards and whipped creams. In walks a fairy vision of wondrous witchery, and with a bow and smile takes her seat just opposite. It is the farmer's daughter, a living creature of eighteen; fair as the lily, sweet as the violet, lovely as the rose, modest as the early morn, and nimble as your own imagination of Deadmoons or Gertrude of Wyoming. You're lost—it's all over with you, and that comes of going in the country out of the way of vanity and temptation, and fancying farm houses to be the nice old-fashioned places of established contentment.—*St. Louis Journal of Agriculture.*

COMPRESSION OF GASEOUS MIXTURES.—If five volumes of carbonic acid and one volume of air are compressed in a proper apparatus the carbonic acid readily liquefies. If the pressure is carried to 150 or 200 atmospheres the meniscus of liquefied acid is gradually effaced, and the liquid finally disappears. The tube then appears filled with a homogeneous matter, which resists all further compression, as a liquid would do. If the pressure is then gradually diminished the liquid suddenly reappears, at a pressure which is constant for fixed temperatures; a thick mist arises, vanishes in a moment, and marks the level of the liquid which has reappeared. The phenomenon cannot be explained by the heat of compression, for the tube is plunged in water which keeps it at a constant temperature, and the compression is made slowly enough for the cooling to be always complete. Cailliet thinks that the gas and liquid are mutually dissolved, so as to form a homogeneous compound. He has extended the experiments to a pressure of 450 atmospheres without varying the result.—*Compt. Rend.*

IRON SHIP BUILDING IN CHINA.—A significant sign of the times is the progress which iron shipbuilding is making in China. A Scotch firm who began by establishing ship repairing yards at Shanghai, several years ago, now employ 1,100 Chinese workmen.

CREMATION APPEARS TO BE MAKING RAPID PROGRESS IN GERMANY. During the year 1879 15 cremations were performed at Gotha. The Cremation Society of Milan has burned 48 bodies in the last three years.

THE MILKY WAY—CHARACTER OF THE PHENOMENON.

The phenomenon of a milky sea has been known to occur in certain parts, but has not been very thoroughly scrutinized. Some have considered the luminous appearance in question an electric effect in thunderstorms; others have attributed it to cadaveric decomposition of marine animal and plants; others to abundant spawn, with fishes moving about in it. But the truth appears to be that it results from an accumulation of animalcules capable of becoming phosphorescent, spontaneously or by friction. Some interesting information on the subject (of an exact character) has been recently published by Lieut. Poornaim, of the French iron-clad *L'Armide*, which in February met with a milky sea in the passage from Point de Galla to Aden. The nights of February 9, 10, 12 and 13 were characterized by the phenomenon in all its splendor, the ship during this time traversing 660 miles (1,100 kilometers) in a mean latitude of 12° north between the meridians of 61° and 51° east longitude. There was no thunderstorm, the sky was clear, the moon new, the barometer, the thermometer and hydrometer were regular, and a gentle northeast monsoon was blowing. The temperature of the surface of the water was constant at 25°. The sea was like a snow-covered field in a clear night, and all trace of undulations was lost sight of. The milky look was hardly disturbed by the motion of the ship and working of the screw (which shows that the layer had considerable thickness. By day all disappeared; but the hue of the sea was somewhat altered. Looked at attentively over the ship's side at night the water was seen to contain an enormous number of luminous particles pressed closely together, and more brilliant close to the side where disturbed. Some 400 of these corpuscles, one or two centimeters long, could be counted in a bucket holding 10 liters of the water. Drawn out, these were seen to be of gelatinous substance, which dried quickly and disappeared, leaving a dark globule one millimeter in diameter, which, in the microscope, presented a transparent ovoid animalcule filled with eggs, and moving its fins and tentacles incessantly. A drop of water added to the dark globule brought back its luminosity, and when the creature was bruised in the hand it gave a bright mark which was quickly extinguished and which had no smell. The milky water kept till day and looked at in the dark, showed no luminosity even though agitated; nor does the water procured by day and brought into darkness. It remains to be determined what causes the luminosity of these animalcules, and the information is also desirable as to the position of the various milky seas on the globe, the times of their appearance, whether they persist or not in the same place, etc. Several of the officers on board *L'Armide* had witnessed the phenomenon before, but never so brilliant or continuous. The *L'Armide*, in going out, had passed 30 leagues further north in Feb., 1878, without encountering anything of the kind.—*London Times.*

GEORGIA SENDS THE EARLIEST FLOUR TO ENGLAND.—The *Marl Lane Express* of May 24th, states that the first barrel of American flour made from the crop of 1880, has arrived in England, consigned to the London *Miller* to be sold for the benefit of an Episcopal church in Georgia. The wheat was sown on the plantation of Mr. J. L. Larramore, of Lee county, Georgia, on the 24th of November, 1879, and reaped on the 10th of April last. It was, therefore, only four and one-half months in coming to maturity. The harvesting was unusually early even for Georgia.

MICA.—A deposit of mica has been discovered about three miles south of Skull valley, Arizona, which promises to be valuable. At a depth of seven ft., sheets of clear mica, four inches square, are being taken out, and the vein is increasing in size as depth is attained.

DOMESTIC RECIPES.

THE IDEAL LEMON PIE.—I submit the following extract from the letter of a friend: "I have at last reduced lemon pie to a science. I take my biscuit-cutter and cut from puff paste very thinly rolled, around the edge I curl a narrow strip of the paste, and bake these shells. While they are baking I prepare the following filling, which 'is very fillin' at the price.' I take my lemon and do not roll it—cause why? it grates better when it is firm. After the yellow rind is all grated into a bowl, I squeeze in the juice, and if any little cells go in I do not say them nay. I then put in a cup of sugar and the yolk of one egg, stir well together. Upon this I pour a large cup of cold water (no milk), into which has been stirred a dessertspoonful of corn starch. I put all into a sauce-pan and stir until it is cooked into a rich, clear, straw-colored jelly. My shells now being baked to look as much possible as if they had come from Rogers', I fill them, and from the white of the egg make a meringue, to softly cover each. I pop them into the oven one brief instant, and bear them in triumph to the pantry to cool. The crust being baked separately, it never soaks."—*N. Y. Tribune.*

PICCALILLI.—To one gallon strong vinegar add four ounces curry powder, four ounces good flour of mustard, three ounces bruised ginger, two ounces turmeric, eight ounces skinned shallots, two ounces garlic (the last two slightly baked), one-fourth lb. salt, and two drams cayenne pepper; put those in a jar, cover them with a bladder, wetted with the pickle, and over this a piece of leather; set the jar near the fire for three days, shaking it three times a day, when it is ready for use. Put gherkins, sliced cucumbers, sliced onions, button onions, cauliflower, celery, French beans, nasturtiums, capsicums, large cucumbers and small melons in jar. All but the capsicums must be parboiled in salt and water, drained and dried on a cloth before a fire. The large cucumbers, or small melons, are split so that a narrow spoon may be introduced, and the seeds scooped out; they are then parboiled in brine strong enough to float an egg, and dried on a cloth before the fire; pour over all these vegetables the above pickle.

A RECIPE.—The editor of an American family paper started a domestic column recently, and a few days afterward a female came into the office, carefully concealing something behind her apron. "Are you the man that published that new and improved way to make currant cake?" He said he was. "You said to mix washing soda with the flour, and stir in a little oatmeal and a little sweet oil to give it consistency?" "I—I—believe so." "And to add 15 eggs and some treacle, and 2 ounces of gum arabic, and set it in a cool place to bake?" "I think that was it." "Well, take that, then!" and the indignant housewife floored him with a weapon that felt like a sand-club, but which he knew in his heart must have been a half-baked chunk of cake constructed on his new plan.

STRAWBERRY SHORT-CAKE.—Make a crust sufficient to cover the bottom of two pie-dishes, rolled thin, of the ingredients which would make raised biscuits; bake both at once; have two boxes or two quarts of strawberries thoroughly cleansed and well sweetened; as soon as the paste is baked, while hot, spread with good butter, cover with half of the berries, sprinkling more sugar on top; cover with the other baked biscuit, butter as before, add the other half of the berries, with more sugar, and wrap well with a clean towel and cover with a blanket, to remain to steam until cold.

A NOVEL RIDDANCE FOR RATS.—An inventive genius filled a small tarleton sack with a spoonful of cayenne pepper, and tacked it over the rat-hole. When the rat bounced out, his eyes were peppered by the sifting from the shaken sack. He squealed like a pig, and escaped. The whole tribe have since migrated.