

Science Siftings

By 'Volt'

The First Chinese Patent.

The Chinese Government, according to German papers, has granted its first patent. It is for an electric lamp, the inventor of which is an inhabitant of Nankin, the old capital of the Chinese Empire, who calls his lamp the 'bright moonlight,' and asserts that it is far superior to foreign glow lights that hitherto have been sold at Shanghai and other Chinese cities. The fact that China has entered upon the granting of letters patent is undoubtedly of more importance than the invention.

The Light and Heat of the Sun.

In the course of a lecture at the Bishopsgate Institute, London, Sir Robert S. Ball said one of the most staggering difficulties in the history of science was the question how the light and heat of the sun had been maintained for so many ages. It had been suggested that it was due to meteorites continually falling into it, also to its constant contraction, and the consequent friction of the particles as they fell together. Calculations had been made showing this might account for its heat for 24,000,000 years. But the geologist might reply: What is that to me? The sun was probably yielding light and heat long before that. Now a suggestion had been made that radium was the source. They had seen that a speck of radium poured out sparks with the velocity of light itself, and manifesting tremendous energy. If there was as much radium in the sun—i.e., presumably as much radium in one mass—as would be equal to one three-hundred-thousandth part of its size, it would keep the sun going for a thousand million years, which would perhaps satisfy the geologist.

A Depraved Insect.

If ever that nasty, irritating insect, the common house fly, had a shred of reputation—a very doubtful point—it was blasted in October at the London Institute by Mr. H. Hill in his lecture on 'Flies.' The fly's capacity for crime is extended by its strength, which is relatively nearly seven times that of a horse, for it can lift twenty times its own weight. It can absorb enormous quantities of oxygen, and is, in fact, a confirmed oxygen toper. The reprehensible habit of walking upside down on the ceiling, to which the fly is addicted, is due to its loathsome habit of exuding gum from each of the 1200 hollow hairs in its feet. The fly, too, has an evil eye, which is divisible into several other eyes. It has also 1700 or 1800 parts all connected with the olfactory nerves, and therefore possesses complete equipment for detecting unsound meat such as is given to no other living creature. Like Lowell's great fleas, which 'have little fleas upon their backs to bite 'em,' the house fly has his petty irritations—sometimes as many as twenty, Mr. Hill said. These eventually kill the debauched insect by their pertinacity.

Suggested Cause of Appendicitis.

Assuming it to be true (says Dr. Wilson in 'Health Talks') that appendicitis is an ailment now more common than in former years, physicians have been concerning themselves regarding its probable cause or causes. My readers do not require to be told that this ailment consists in the inflammation of a little tag or appendage which exists at the junction of the small bowel with the large. The disease can be satisfactorily treated by operation, but that which forms a matter of public interest is its prevention. Is there anything in our existent mode of life which contributes to induce this trouble? This question has lately been answered by a medical man in the affirmative. He asserts, and I think with reason, that the pernicious habit of using aperient medicines without rhyme or reason is the main source of the trouble. There can be no doubt that a vast number of people swallow such drugs as 'cure-alls.' The result is that, as an aperient loses its effect, larger and larger doses require to be taken. The consequence of this utterly indefensible use of such medicines is that the natural functions of the bowel are interfered with to an extent which renders the attack of disease very likely to occur. Whether this view be correct or not, it is high time to enter a strong protest against the indiscriminate employment of purgative medicines, many of them widely advertised. The cure of most digestive troubles is one by diet and not by drugs. The latter are only useful to begin a cure, which due care in diet should confirm and establish. We may do worse than remember the hint which the physician has given.

The Home

By 'Maureen'

Rhubarb Jam.

Put $\frac{3}{4}$ lb of sugar to each pound of fruit, and some whole or crystallised ginger. Boil till of a pinkish color.

Gooseberry Jam.

Put 1 lb of sugar to each pound of green gooseberries, and 1 cup of water to about 6 lb of fruit. Boil till fruit turns bright red.

Almond Icing for Cakes.

Put 1 lb ground almonds and 1 lb castor sugar into a basin. Mix well and add a few drops of lemon-juice and vanilla flavoring, and enough well-beaten white of egg to mix all to a stiff paste. Spread evenly over the cake, smooth with a knife dipped in hot water, and put in a warm place or cool oven till quite dry.

Fig Jam.

Put $\frac{3}{4}$ lb sugar to each pound of fruit. Halve the figs, and cut off stems and remove all the loose skin possible. Place in preserving pan with half the quantity of sugar, spread over the fruit. Let this stand all night, and boil next day for three-quarters of an hour, then add the remainder of the sugar, and boil twenty to thirty minutes till transparent.

Chutney.

Take 12 lb green apples or gooseberries, 3 lb brown sugar, 2 oz white pepper, 2 teaspoonfuls Cayenne, 4 teaspoonfuls salt, $2\frac{1}{2}$ teaspoonfuls ground ginger, $1\frac{1}{2}$ lb onions, 4 pieces mace, 1 lb currants, 1 lb raisins, and 1 oz mixed spice. Cut apples into quarters, put in pan with other ingredients, and cover with 1 gallon good vinegar, and boil for 4 hours.

Plain Christmas Cake.

Well grease a really large cake-tin. Melt $\frac{1}{2}$ lb dripping in a saucepan, add to it $\frac{1}{2}$ lb cane sugar and 1 lb treacle. Stir over the fire till the sugar is dissolved. Put 4 large breakfastcupfuls of flour, 1 teaspoonful carbonate of soda, $\frac{1}{2}$ lb currants, and $\frac{1}{2}$ lb stoned raisins into a basin. Pour the treacle and currants into the flour, and 1 large breakfastcupful sour milk and 2 well-beaten eggs. Mix all thoroughly. Pour into the tin, and bake about one and a half hours, or longer if necessary.

Why You Should Eat Spinach.

Prominent specialists claim that spinach is the most precious of vegetables, on account of its medicinal and strengthening properties. The emollient and laxative virtues of spinach, owing probably to the salts of potassium it contains, have been long known. It is excellent for the liver, and as a consequence freshens the complexion. Some vegetables contain a relatively large dose of iron. According to Boussingault, the proportion is 0.00074 of iron in one hundred parts of French beans, 0.00083 in one hundred parts of lentils, and in spinach very much larger. The chemist Binge has proved that spinach and yolk of egg are proportionately richer in digestible and assimilable iron than all the most renowned ferruginous remedies. Its great value and growing importance are shown in the fact that spinach is already an active ingredient in several new tonics.

Maureen

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