

Pure Tin.

THE adulteration of food is a matter in which the whole community is interested, and an act against which a universal indignation is felt, but few persons are wicked enough to prosecute on a large scale adulterations which are positively injurious to health. Many of the substitutes for less expensive material are entirely harmless, or if not that, at least not actively poisonous. But what shall be said of the morality of the systematic adulteration of tin vessels, which hold all kinds of food, with lead, one of the most insidious and destructive poisons that can enter the human system? Yet so common is this practice becoming that it is said to be difficult to find tin entirely pure, while a great deal of inferior manufacture has a larger proportion of lead than of the pure metal which it professes to be. These facts have great significance for housekeepers, whose especial attention is called to the fact on account of the danger which exists of their using vessels or cans of doubtful quality. Of late a great reduction has taken place in the price of a certain class of canned vegetables and fruit, and the cheap rates at which they are sold often induce persons to buy them more freely than they would otherwise do. Many have discontinued the purchase of such cans, because they found the contents unhealthy, and attributed it to the quality of the fruit. Perhaps a more serious explanation could be found in the nature of the tin of which the cans are made. It is not an uncommon thing in opening canned tomatoes, or any other acid fruit, to become aware of a metallic odor, which ought to give speedy warning that the contents are unsafe and should not be used. Such odor is too often mistaken for that of the acidulous fermentation of the fruit, when it is wholly due to the presence of lead in the tin, which has long been subjected to the action of the acid juices, and converted into the most violent poison. Fortunately, it is not generally in sufficient quantities to produce symptoms well enough marked to be recognized as the effects of poison, but they are nevertheless often troublesome, and always decidedly injurious, for the smallest amount of the acetate of lead, acting upon the delicate membranes of the stomach and bowels, cannot fail to produce evil results, and when the thing is repeated again and again, to give rise to very grave and dangerous disease.

There are chemical tests which can be applied to detect the presence of even a very small amount of lead, but they are not generally of easy application by unpracticed hands, and it is therefore in some other way that the careful housewife must avoid the evil, while the laxity of state sanitary laws permits its citizens to be exposed to the practices of unprincipled manufacturers. One means of avoiding adulterated tin is by taking pains to buy that which bears the brand of reliable houses, and by paying a fair price. Cheap tins are always somewhat suspicious, for the manufacture requires careful work and good material, and a really good article cannot be produced at a rate much below the market price.

Block tin is preferable to all others, but it is also more expensive. The kind in common use is sheet-iron, covered with a thin sheet of the pure tin, and, if well made, is safe and useful for ordinary purposes, and some of these involve no risk; but for all utensils used for cooking, or for cans in which fruit, vegetables or meat are preserved, it is a matter of essential importance that the tins are of the finest quality. Beware, then, of purchasing carelessly of irresponsible dealers.

Something about Geraniums, etc.

As the cold season approaches, ladies living in the country, and dependent on the burning of wood fires to heat their houses, are always greatly troubled as to the probable fate of their "house-plants."

It is known to many—though I find the knowledge is not universal—that most species of geraniums, pelargoniums, etc., that have any wood on them, are readily kept over winter by pulling them out of the earth by the roots and hanging them up in a dry, airy cellar that will not freeze.

To keep any house-plant in the cellar over winter successfully, the cellar must be dry (if damp your roots will rot), airy, and, if possible, light. Under these conditions almost any healthy plant may be kept over winter, and in most cases will actually grow, and have even been known to bloom, though I do not think this latter desirable, as it exhausts the vitality of the plant. And right here let me observe that all plants, even those that are in pots or boxes, will keep the better for being suspended in some manner, or raised from the ground (a swing-shelf suspended from the ceiling is good for this purpose), so as to get plenty of air.

Above all things, be sure that your plants are free from vermin ere you store them, or the plants, not having the stimulating influence of sunlight, will soon be destroyed by them; for no difference how low the temperature, the insects will live wherever the plant can. A few thorough drenchings of the stems and leaves with a suds made from whale-oil soap, which may be procured for a few cents at any druggist's, will effectually destroy all kinds of plant lice. This soap has a very unpleasant odor, and is best applied by means of an atomizer, but lacking this a toy sprinkler is the best substitute.

To many who have choice varieties of petunias it may not be known that either the single or double varieties are readily propagated from cuttings, and may be quite as easily kept through the winter as other plants; and few plants are better adapted for showy hanging baskets than the petunia, as it is a constant bloomer, and will bear a great deal of neglect or careless treatment.

Geraniums for winter blooming should be started from the seed early the preceding spring, or from cuttings planted the latter part of August. *Appropos* of cuttings, a new way that seems to meet favor from those who have tried it, is to snap the cutting nearly off, leaving it cling to the parent stem by a small piece of the bark; this will supply it with sufficient nourishment, and at the end of ten or fifteen days a callus will have formed at the point of fracture; it may now be planted in good earth, and will immediately take root if given plenty of light and watered sparingly. Too much water soon causes young geraniums to rot. By far the finest geraniums for any purpose are those started from seed. The experiment, to those who have not already tried it, is an easy one, and very fine new varieties are occasionally obtained in this way. The seeds, sown in shallow boxes in a sunny window early in March, and watered with warm water, will usually sprout inside of from ten days to two weeks, and when two inches high should be picked out into small pots, and these exchanged for still larger ones as the plants increase in size. That geranium seeds have great vitality is proven by the fact that they will sometimes lie dormant for months, through every vicissitude of temperature and neglect, and finally grow. Watering with warm water, occasionally adding a few drops of *aqua ammonia*, in the proportion of five drops to a quart of water, is said to have a beneficial effect on faded or sickly plants,

and small pieces of *gum camphor* pressed into the earth around the roots is said to destroy not only earth-worms of all kinds, but to stimulate the plants to great luxuriance of growth.

Where Does the Day Begin?

As a matter of fact the day begins all round the world, not at the same instant of time, but just as the sun visits successive portions of the earth in his journey from east to west. But the traveler who crosses the Pacific ocean can give another answer to the above question, and that is that on the 180th degree of longitude, one-half of the circumference of the globe—starting from Greenwich east or west—there is an arbitrary change or dropping of a day, and that at this point, if anywhere, the day may be said to begin.

It was with strange feelings that the writer, crossing the Pacific, having gone to bed on Saturday night, leaving everything pertaining to the almanac in a satisfactory condition, awoke on *Monday morning!* Sunday had completely dropped from our calendar—for that week at least.

Every one knows that in traveling round the world from east to west a day is lost, and in order to adjust his reckoning to that of the place he has left, one must drop a day as if he had not lived it, when in reality the time has passed by lengthening every day during the journey. For a long time it was the custom for sailors to effect this change pretty much where they pleased; but it has now become a settled rule among American and English navigators that at the 180th degree a day must be passed over if going west, and one added if going east, in which latter case the traveler enjoys two Sundays or two Thursdays, as the case may be.

It is most likely that this particular degree was decided on from the fact that, except a few scattered islands of Polynesia, there are no large communities with their vast commercial and social transactions to be affected by the change. It will be remembered by all who have read *Around the World in Eighty Days* what an important part in the story this simple event plays.

Women of Yesterday and To-day.

THE MAID OF ORLEANS.

THAT women have played a noble part in many a stirring drama of the world's history is not to be contradicted. From early times we have records of those who were impelled by an irresistible impulse to cast aside the conventional trammels of custom, in order that a wrong might be redressed, an oppressor hurled aside, or some deed of valor and high enterprise accomplished. It is a brilliant and noble company—not that they were all blameless—but that each did a work which, at the time, there was none else to do. One name there is, however, of whom the worst that could be said was that she was a pronounced enthusiast; one about whose life time and misrepresentation have thrown a cloud of falsehood; one who, though of the lowly of earth, was the means of freeing her country's neck from the heel of the invader.

A little more than a hundred years ago there died in France Henri de Duls, the last male representative of a noble family which had been founded nearly four centuries before by a woman; and at this day there stands in the Maiden's Square in the old Norman town of Rouen, on the spot where she was so infamously executed, a monument to the memory of this same heroic woman,

Jeanne d'Arc, the Maid of Orleans, as she has been called after the town which was the scene of her principal triumph. Let us see if, in the clearer light of to-day, we cannot arrive at more just conclusion as to her career than has been accorded her memory for so many years.

At the close of the fourteenth century the English were in possession of a great portion of France, the result of the conquest begun by Edward III. King Charles VI. of France was then the reigning monarch, and under his rule it seemed as though a new era of prosperity might be in store for the troubled country. The chief obstacle to this, however, was the internal dissensions and feuds of the French nobles, some of whom scrupled not to ally themselves with the English king to further their own ends. Henry V. of England ascended the throne in 1413, and his reign was marked by fresh hostilities in France, the most important event of which was the battle of Agincourt, in which the French were completely routed. Still in the prosecution of the war, he died at Vincennes in 1422, and his conquests and kingdom were left to the hands of a puny infant sixteen months old. Shortly after the French king, Charles VI., followed him to the grave, and his son was crowned as Charles VII. in the city of Poitiers, instead of at Rheims, as was customary with the kings of France. But he was acknowledged as king by his own adherents, nevertheless. The war was still carried on by the English in the person of the Duke of Bedford, regent for the infant Henry VI. Although Charles and his friends made a bold resistance, they were driven from one stronghold to another, and were finally driven from the north, and forced to take refuge in the town of Chinon in the south. One strongly fortified place in the north, however, still held out for the French king, and until this was taken the English could not with safety pursue Charles to his retreat. All the hopes of the French, therefore, were centered in the city of Orleans, and his best generals and all the soldiers he could gather were sent for the defense of its fortifications. At length, the English, under the Earl of Salisbury, appeared before the city ten thousand strong, and prepared to starve the garrison into submission. At the end of six months it appeared as though the defenders must surrender. So close a watch had been kept by the English that no provisions had found their way into the city, and the best soldiers of the garrison had been killed in the sorties that had been made from time to time. Charles was plunged in despair, and was seriously meditating flight to some of the neighboring kingdoms, when an event occurred which was destined to turn the scales in his favor. He was informed that an extraordinary person was desirous of seeing him, who would take no denial, but was at a neighboring village waiting his permission to appear before him.

In the little hamlet called Domremy, on the banks of the river Meuse, was born, about 1410, Jeanne d'Arc, or as she is called in English, Joan of Arc. Her father's name was Jacques d'Arc, and she was one of many children. Owing to the poverty of the family, Joan was early sent to service in the village tavern, and was very hardy and robust, so that on her devolved the duty of taking the horses of the travelers who stopped at the inn, and in this way she became familiar with their management, and was accustomed to ride the animals without saddle or bridle. This simple fact in her early life was afterward one of the causes of her condemnation; for it was argued that only by the aid of witchcraft could a woman have ridden into battle as well as Joan did.

She was of a solitary, morose nature during her childhood, and her hours of rest from work were spent, not in the company of those of her own age, but in solitary rambles in the surrounding country, and in constant attendance at church, where she

was very fond of decorating with wild flowers the statues of the saints with which it was adorned. When about fifteen years of age she began to claim to have seen visions, and to have had conversations with the Virgin and the angels. There is no doubt whatever that, to the end of her life, she believed in this herself—perhaps her solitary life had led this simple, uneducated child to dream of things which would have had no existence in a more cultured mind. But the age was a superstitious one, and she found many willing ears among the credulous village folk. The country for miles round was intensely loyal to the unhappy King Charles, and it is not surprising that her dreams, colored perhaps by these surroundings, took the shape that she was to deliver Orleans, and conduct Charles to Rheims, where he should be crowned as all the monarchs of France had been before him. She stated that one of her dreams had charged her to apply to the governor of the near town of Vaucouleurs, who, she said, would furnish her with means to reach the court at Chinon; and to this end she endeavored to get an uncle to accompany her thither, and on his refusing, went by herself and succeeded in obtaining an interview with the governor, to whom she announced her mission. At first he derided her tale, but her importunity at length caused him to give a reluctant promise to aid her, and a gentleman in his service offered to conduct her safely to Chinon, if the governor would bear the expense. The journey was irksome in the extreme, but at length she arrived at the town of Fierbois and requested permission of the king to appear before him, announcing herself as one commissioned by heaven to drive the English from France, and to conduct him to Rheims, there to be crowned and anointed.

On February 15, 1428, Joan of Arc was granted an audience of the king at Chinon. In order to test the truth of her assertions as to her inspiration, the maid was shown into a room filled with the gentlemen of the court, from among whom she singled out the king, although he was dressed as plainly as any of the others; and as a further proof of her sincerity divulged a secret known only to himself. However true this may be, certain it is, that she succeeded in convincing King Charles and his party that there was something in her mission. She was put to the test by many of the clergy, but bore her examination without flinching, and on several different occasions adhered to her first story. In the end the clergy decided that she really had received her mission from on high, and the king was advised to employ her.

Every honor was now paid her; a banner and a suit of armor were furnished her; and mounted on a snow-white horse, and attended by a numerous body guard, she placed herself at the head of the king's troops.

She desired that search be made behind the altar in the cathedral at Domremy, where would be found a sword with certain marks on it, which she described. Her enemies, of whom there were already not a few, jealous of her rapid rise to power and influence, declared that she had herself placed the sword where it was found; and this is very likely.

Of course, all these doings had reached the ears of the English besieging Orleans, and when she sent a letter demanding that they depart from the soil of France, they only laughed and said she must be either witch or devil.

Her first exploit was to send relief in the shape of provisions to the besieged, and under her leadership the French soldiers succeeded in accomplishing what they had often before essayed in vain, and Joan entered the city and carried hope to the hearts of its defenders. In a sortie which she led she was severely wounded, and in the first flush of pain gave way to tears; but hastily repressing her weakness she caused her

wounds to be dressed, and placing herself once more at the head of the troops, gained a victory. Thus heroically led, who could help showing valor? and thus the French gained one advantage after another; and in inverse proportion as the French gained courage the English lost it. The soldiers refused to fight against a witch, as they called her, and in less than three months the Earl of Suffolk was forced to raise the siege. He was closely pursued by the French, who performed prodigies of valor. They looked on the Maid as the messenger of God, and obeyed her in the slightest matters; and it is worthy of note that she never forgot her sex. True, she had assumed a man's dress, for which she was condemned by many, but it is hard to say how she could have done otherwise, seeing that the dress of a woman was totally unfitted to the task in which she was engaged. She never struck a blow save in self-defense, and by her endeavors the camp became very different morally from what had been known up to that time. She indulged in no luxuries, either of dress or at the table, and was strict in the observance of her religious duties. After victories at Jergeau, and Troyes, and Chalons, she entered Rheims in triumph, and shortly after the first part of her mission was fulfilled, and Charles was crowned with great pomp and rejoicing. She then urged the king to lose no time in making an attack on Paris, and in September, 1429, the assault was made with great fury, but the defenders had the best of the fight. During the action the Maid was again wounded, and lay on the field of battle unnoticed for some hours. She was so grieved at what she deemed unkind neglect that shortly after she visited the Church of St. Denis, hung up her arms there, and declared her intention of using them no more. The king endeavored to dissuade her, and with success; and as a mark of honor raised herself and all her family to the rank of nobility, as has been already referred to.

In the spring of 1430 hostilities were resumed, and again the French were victorious in several hardly-won battles. But on May 20, 1430, in an action before the town of Compiègne, the Maid was taken prisoner by the English and sent prisoner to Rouen. While in confinement every effort was made to get her to confess to witchcraft, but without avail. But the English were resolved on her death, and in this they were aided by the Bishop of Beauvais, who caused her to sign a paper, which she was unable to read, containing a list of crimes which she had never committed, and among other things binding her to resume the dress of her sex. One night, however, he caused her clothes to be taken from her while she slept, and put her warlike dress in their place, and of course when she awoke she was forced to dress herself in them, no doubt with many a sigh for the bygone days. This seeming relapse was quickly taken advantage of by the infamous bishop, and she was delivered to the English, who lost no time in making preparations for her execution. On the morning of May 31, 1431, she was led to the stake in front of the market place at Rouen, and perished heroically. Almost her last words were to the effect that within seven years the English would lose a far more important place than Orleans; and she was right, for in 1436 Paris passed into the hands of King Charles, and before twenty years the English had lost all their possessions in France save Calais. So died the heroic Maid of Orleans, and her ashes were, by the order of the same infamous Bishop of Beauvais, thrown into the river Seine.

In the limits of a short article it is not possible to glance at more than the leading points in her career, yet it is hoped that some false impressions may have been corrected, and justice done to the memory of a heroic woman.