

respect, they are worse, because what is said is often forgotten—what is written remains.

While pointing out the dangers of writing merely for the sake of writing, we do not wish to furnish those who neglect this means of intercourse with any excuse. Friendship delights in the frequent interchange of letters. To love it is almost necessary, and estrangement often follows on neglecting to fulfil the promise of writing, or on leaving letters unanswered. In order to save oneself a little trouble, it is cruel to keep those who love us in suspense; but, we must own, gentlemen are more frequently guilty of this cruelty than ladies. They have business to plead in excuse, and for this very reason (to return to the former argument) ladies should not enter into arrangements with their suitors for daily correspondence. Of course the lovers agree, but business interferes; the lady is indignant if she does not receive letter for letter; and as love is not always reasonable, the plan of writing every day often ends in a serious quarrel.

CARELESS AND UNSUSPECTED POISONING, AND HOW TO GUARD AGAINST IT.

We believe the cases of intentional poisoning are insignificant in number as compared with those which are the result of accident or carelessness, the latter being by far the most fruitful source of this species of mortality, and, at the same time, that which excites the least attention, after the first sensation caused by the report of such cases in the newspapers has died away. Take the case of Smethurst, and the poisonings at Clifton as examples. Everybody remembers all about the former case, in which only one death was involved, while not one in a thousand, probably, remembers the number of deaths and the amount of suffering caused by the latter occurrence; and still fewer could say what punishment was inflicted on the man who sold one poison to colour the buns instead of another of a less deadly nature, which he imagined he was selling. The extent to which poisonous substances are used to give a pretty colour to certain sweetmeats and jellies, is another secret cause of injury to the system, without the sufferer or his medical attendant being aware of the cause of the indisposition. Let those who are in the habit of dining out, bear in mind that in nine cases out of ten, the jellies which look so pretty owe their prettiness to some chemical preparation, the effect of which on the stomachs of those who eat of them was never the subject of a moment's consideration on the part of the cook. Thus it happened that at a dinner-party, where several persons ate of a very beautiful green jelly, all of them were made more or less ill, and some died, the colouring matter used in this case being an arseniate of copper. People read of these occurrences, and forget them, as accidents which are never likely to happen to themselves; but when a paragraph appears, hinting at some more hidden source of poisoning, a sensation of alarm spreads over the whole kingdom. Not very long ago, there was a statement, copied from one newspaper into another, that arsenic had been found in turnips, which must have been derived from the artificial manure employed! Now, as the use of artificial manure is as universal as the consumption of turnips, everybody imagined that all turnips must contain arsenic, and there was an immediate falling-off in the demand for that esculent for domestic purposes. The alarm was not altogether groundless, for plants do actually take up arsenic into their tissues, when it is present in the ground in which they are grown; but the fact is, that artificial manure contains such a minute quantity of arsenic as to render poisoning from this cause in the highest degree improbable. At the same time, the fact that so deadly a poison is contained in some manures, is a strong argument in favour of the appointment of public analysts, provided for by a Bill which has recently passed through the House of Commons. Experiments have been made, with the view of ascertaining the effect of watering cabbages with an arsenical solution, and it was found that, as soon as the arsenic had ascended the stalk, a little above the ground, the plant invariably died. Similar alarm was excited by the statement respecting the action of the water on the lead which lines our cisterns, but we suppose that, since the publication in the *Times* of the letter of the editor of the *Photographic News*, these apprehensions have died away; at all events, we have heard nothing of the matter since. There is, however, a species of lead poisoning infinitely more dangerous, the action of which is confined almost exclusively to the male sex. The quantity of tobacco and snuff

sold throughout the country, packed in tinfoil, is very large; and it has been found, by experiment, that these substances act on lead with considerable energy, consequently, a portion of the material in which they are enveloped is decomposed, and a salt of lead is formed in the tobacco or snuff in a greater or less proportion, according to the length of time it remains in the tinfoil, and doubtless, also, according to the degree and kind of adulteration to which these articles have been subjected previously. This is a very important matter, and one which it is only necessary should be made public to put an end to this kind of poisoning, inasmuch as it is just as easy to procure these commodities from the bulk as in the neat-looking packages in which death or sickness lies concealed. But perhaps the most insidious and most universal poisoning—which probably affects the health of thousands of individuals in this country without the cause being suspected—arises from the use of green paper in the decoration of rooms. A short time back a case was published relating the narrow escape from death of the younger branches of a family from this cause; and more recently an instance has occurred within our own knowledge, where a father and son, the former a strong, robust man, the latter a boy, had been ailing for six months, the indisposition commencing almost immediately after the room they occupied had been newly-papered with green paper! As we do not wish to excite alarm without pointing out a remedy, we will suggest two methods by means of which anybody may ascertain whether arsenic is contained in a green specimen of paper of this colour. One method is, to take a small piece of the paper and immerse it in a solution of ammonia, allowing it to remain therein a considerable time. If the solution assumes a blue tinge it may be presumed that arsenic is present. Take out the paper and drop a piece of crystallised nitrate of silver into the liquid, when, if arsenic be really present, the crystal will become yellow. The other method, which we consider to be more certain, is to scrape off the surface of the suspected paper from a small portion of that which covers an obscure part of the room; then insert a paper tube inside a glass test tube, and pour this powder to the bottom, the object of using the paper tube being to prevent any portion of the powder from touching the sides of the glass. Remove the paper tube, close the vessel tightly, and expose the contents to the heat of a jet of gas until the whole is thoroughly carbonised. If arsenic be present it will sublime, and deposit itself as arsenious acid on the sides of the tube. Let it stand till quite cold, and then take out the burnt powder which remains in the tube, and pour in a small quantity of distilled water, add two or three drops of liquor potasse, and boil for a minute or two. The addition of a little ammonio-nitrate of silver or ammonio-sulphate of copper will cause a green or yellow precipitate, if the solution contains arsenic.

It only remains now to suggest an effectual preventive against any injury resulting from living in a room hung with arsenical paper, and this consists in having the paper well-sized and varnished.

Scientific Notes.

ALLEN'S GAUGE.—This consists of a hollow metal pillar, the chamber of which is connected with a thick glass tube parallel to it, and below, by a bent pipe of twice its capacity, with the boiler. The air in the gauge, acted on by the water or condensed steam in the pipe, indicates the pressure by the height of the water-line in the glass tube opposite a graduated index. The simplicity, sensitiveness, and facility of adjustment of this gauge recommend it, since the air, acting as an elastic spring, can be renewed at will, and is less subject to be influenced by changes of temperature than the metallic springs generally used for the purpose.

THE LARCH.—This tree, which, during the last century, has been so extensively planted in the United Kingdom, especially in the north, appears to be generally strangely deteriorating. In many places only one tree in three is free from decay. This is variously attributed to degeneracy of the seed, excessive moisture, atmospheric influences, oxide of iron and other deleterious minerals in the manures employed, secret ravages of insects, fungi, or to mismanagement; whereas the fact may be sufficiently accounted for by the climate and soil being uncongenial to it. The larch is easily convertible, and, when sound, which is rarely the case, is durable; but its liability to warp forms a strong objection to its use, except where large unwrought timbers are needed, when it should be from 50 to 100 years old. It is only applicable to

fencing, telegraph and hop poles, coal-pit props, and, when large, to forming railway sleepers. It is unfit for interior furnishing, and not equal to English oak for naval, or Baltic pine for architectural purposes. It is economical only for temporary buildings, the cost of seasoning, even on the spot, being fully equal to the differential price of other timber in carriage. Under these conditions its adoption for plantations has been unwise, and further culture of it is to be deprecated.

THE ENGLISH OAK.—It is stated on good authority that the insects to whose punctures galls are attributable, are making such ravages both in this country and America, that in a few years the extirpation of the oak tree is imminent, unless some remedy be promptly resorted to.

SINGULAR COAL.—Near Cairo, in the vicinity of the N. W. Virginian Railway, live coal has been recently discovered of a peculiar character. On examination, it is found to be a mass of crystallised mineral oil, or petroleum, without any stratification or intermixture of other substances. When laid on a hot metal plate, this singular substance melts like wax. It yields 165 gallons of crude oil to the ton. After a single process of distillation 82 per cent. of impure oil remains, and after a second process 61 per cent. of a clearer oil, and 30 per cent. of lubricating oil and paraffin result. It is thought that if shafts were sunk to sufficient depth a natural reservoir would be discovered, from which this vein has originated, similar to that in an adjacent county.

THE LARYNXOSCOPE.—The instrument with this learned name, meaning the throat-inspector, has been beneficially used in the Parisian hospitals, and effectually removes the difficulty hitherto experienced by surgeons in treating diseases of the throat, when left to judge of its condition by external appearances; this device enabling them to inspect minutely parts hitherto concealed from their research in the living subject. The patient being seated, with open mouth, before a lamp, a concave mirror concentrates its rays, so as to direct a flood of light into the throat. A smaller mirror is at the same time introduced by a wire into the cavity of the throat, on a line with the tonsils, and being inclined at an angle of forty-five degrees to the larger one, reflects back upon it the organs thus vividly illuminated, so that they can be as satisfactorily examined as if the surgeon had seen them directly.

DEAFNESS.—Mdlle. Cléret, a young woman in humble circumstances, anxiously pondering on the means of obtaining relief from the deafness that afflicted her, conceived the idea that sulphuric ether would prove efficacious, and on trial found so much benefit from it, that she was encouraged to administer it similarly to two deaf and dumb children. As the experiment was followed by the happiest results, she devoted herself to their education, and her mode of treatment became known. The French Government commanded that this new specific should be tested in the public hospitals, and a favourable report has been recently made as to its efficiency; but the discoverer of this means of alleviating suffering is beyond the reward of her labours, having become insane from excitement. The ether is to be dropped into the ear of the patient daily, in the proportion of from 4 to 8 drops for a child, and double that quantity for an adult; but it would be very unwise for any person to meddle with the delicate organism of the ear without the advice of a medical man.

GARIBALDI.

CHAPTER VIII.

The struggle of the inhabitants of the Two Sicilies to obtain a constitutional government is not a story of yesterday, but has been carried on for more than half a century, sometimes in secret, sometimes openly, but always with a devotion, courage, and disinterestedness which proved them worthy of a better fate. In England, till very lately, but little was known of the actual state of the kingdom subject to the sceptre of the Spanish branch of the Bourbons; a race more ignorant and despotic than even the *branche aînée* in France, of whom it was justly said on the restoration, they had learnt nothing and forgotten nothing. Hundreds of our countrymen visited Naples every year—invalids to seek renewed health from its delicious climate, artists to sketch the scenery, antiquarians to study the relics of Herculaneum and Pompeii, scholars to elucidate some obscure point in history, and occasionally a traveller of philosophic mind to examine the condition of the people. The latter formed the exception. On their return they rarely published