

relieved by being gently soothed, others may need a soothing drink, followed by rest; but at all events, as it is only a weakly person who can be subject to hysterics, tonics should be taken in the intervals, quinine and iron &c., with good diet and moderate exercise, and the bath.

Have my readers ever heard of a disease called *St. Vitus' Dance*? It is characterised by uncontrollable movements of the hands, or feet, or face, or even of the whole body, which greatly interfere with walking, or working, or even talking. It is far more common among young girls than among boys. Very distressing though this complaint be, both to the patient herself and to her friends, most cases can be cured by care and kind treatment. Patients who suffer from *St. Vitus' Dance* are generally irritable in temper. They ought never, therefore, to be excited, far less mimicked. They should have no worry, not even the worry of lessons to learn. The diet should be nutritious, with plenty of milk. The cold shower bath may be tried, it does great good when the shock can be borne. Or the sea-salt bath may be taken every morning before breakfast, cold if possible, if not, tepid. Two large handfuls of sea-salt should be added to each bucketful of water used. Then, exercise out of doors will be found exceedingly beneficial, if taken with regularity and judgment. Meanwhile cod liver oil must not be forgotten, and a tonic; I have great faith in a combination of zinc and steel, with an occasional aloetic pill. Take twenty grains of phosphate of zinc, one drachm of tincture of iron, one drachm of dilute phosphoric acid, and mix in eight ounces of peppermint water. Of course a chemist or druggist must compound this; the dose will be two tablespoonfuls twice a day, for a girl about fifteen; if only about ten years of age, one tablespoonful will be enough.

The old-fashioned plan of treating a *common cold* is by no means to be despised, and if taken in time is generally effectual. Warm drinks should be taken, according to this method, before going to bed, and about eight grains of Dover's powder for a girl of fourteen or fifteen. A handful of mustard should be thrown into a pailful of hot water, and used as a foot-bath, and an extra blanket should be put upon the bed to induce perspiration. Care should be taken to wrap up well next day, and to live as well as possible.

A teaspoonful of the solution of the acetate of ammonia, with fifteen to thirty drops of the spirits of sweet nitre, taken in cold water, three or four times a day, is a nice mixture to reduce the heat of body and the feverishness caused by a cold. So simple a remedy should find a place in every family medicine chest. When the cold attacks the chest, there will be at first a harsh, dry, and painful cough; the pain gets less or goes away entirely when the cough is accompanied by expectoration, which it is in the second and last stage. A mustard poultice may be applied to the front of the chest, or friction, till the lower part of the throat and upper part of the chest are well reddened, with turpentine. You apply the turpentine by pouring about a tablespoonful of it over a piece of flannel, wrung from water as hot as you can hold it. This and the same treatment as that recommended for a common cold will usually give relief.

Many young girls are greatly troubled with *indigestion*. This tiresome complaint, trifling though it may seem to some, should never on any account be neglected, because it is the forerunner, and even the cause, of many dangerous and fatal illnesses. Independent of this, no one can look well who suffers from it; the complexion of a dyspeptic girl is never clear, nor is her eye bright and full. Anyone suffering from indigestion should first and foremost find out the cause. Let her ask herself these questions: Do I take sufficient outdoor exercise? Do I practise early rising

and always take my matutinal bath? Do I eat intemperately or eat in haste? Are my studies too long and tedious? The lighter and the more easily digested the food which a dyspeptic person takes the better, too long intervals between meals are injurious, and so, of course, is overloading the stomach. Milk is the best beverage, and tea should be avoided. Ginger ale may be taken with dinner; of medicines the fewer the better, but gentian bitters will do good if taken about half-an-hour before meals, and if there be paleness of the countenance, or inside of lips and gums, iron will do good (steel drops). If the tongue be yellow or white in the morning, the liver is probably somewhat in fault, in which case dandelion tea may be taken in doses of half a wineglassful three or four times a day. The proportion is, of dandelion root sliced and bruised, one ounce boiled for a quarter of an hour in a pint of water. It is then simply strained, and enough water added to make it measure a pint. A teaspoonful or two of cream of tartar may be mixed in water, and half a teaspoonful of Howard's carbonate of soda added, and taken first thing in the morning; this medicine is very cooling and agreeable. A small teaspoonful of carbonate of soda in a wineglassful of water is an instantaneous cure for *heartburn*.

I know that many of my youthful readers suffer greatly from that most dreadful complaint called *tic douloureux* or *neuralgia* of the face. The pain is usually confined to one-half of the face and head, and comes on in paroxysms of great severity; an attack may last for days or even for weeks. Then it may be absent for quite a long time, when some little irregularity in diet or accidental chill may bring it all back again. It is most common in *weakly* girls.

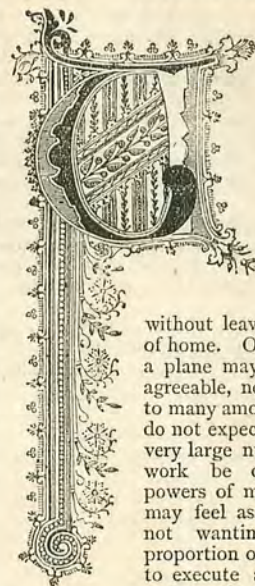
To get rid of tic, the first thing to do is to have the teeth examined by a proper dentist. The removal of a bad one will often in itself suffice to effect a cure; a mild pill of aloe and pepsine combined may be taken about once a week, but stronger medicine is objectionable. An ointment composed of one grain or a grain and a half of aconitine with sixty grains of lard may be carefully and cautiously rubbed into the painful part of the cheek in front of the ear. A skilled chemist would tell you exactly how to use this. Liniments of chloroform, belladonna, and aconite are also worthy of a trial. But there is one medicine for the relief of neuralgic pains that I must not omit mentioning, because it often—mind I do not say, always—acts like a charm; I refer to sal ammoniac. The dose for a grown up person would be twenty grains in about half a cupful of water, repeated every hour till four doses were taken. If relief is obtained, the medicine should be taken three or four times a day for a week. About half the dose would do for a girl of about twelve.

Having got rid of the torture, a great effort ought to be made to improve the general health, and so prevent its return. Quinine wine should be used three times a day, with steel drops if the patient be pale and bloodless looking. The diet should be nourishing. Milk should be substituted for coffee or tea. The clothing ought to be warm, and the feet especially kept comfortable, white flannel must be worn next the skin. The Turkish bath twice a week is worthy of a trial.

I hope my readers will get any prescriptions I may give from time to time, either in my papers or in my Answers to Correspondents, made up by a regular chemist, except indeed, the more simple of them, such as dandelion or chamomile tea, &c. I would also remind them that unless attention to the ordinary rules of health is paid, such as regulation of diet, exercise, fresh air, early hours, and the bath, medicines will not work the wonders which they ought.

HOME TRADES.

FRAME-MAKING.



THE art of making and gilding picture frames appears to have been much overlooked by women hitherto, as a branch of industry which might be easily accomplished by them, and this

without leaving the threshold of home. Of course, to handle a plane may not appear either agreeable, nor very practicable to many amongst them; but we do not expect to find pupils in very large numbers, and if the work be quite beyond the powers of many of our sex, we may feel assured that there is not wanting a considerable proportion of men also, unable to execute a well-constructed, and neatly-finished piece of handiwork of any description, even if it were to save their lives!

The first consideration must naturally be given to the amount of expenditure essential to the carrying on of the work. Fortunately, a good deal of labour and time is saved in frame-making in consequence of the facility of procuring strips of every variety of prepared mouldings; and even ready gilt, if desired. These may be purchased in any lengths required and suitable for making gold frames, from the handsome "Alhambra," down to the simplest "bead." There are also ornamental mouldings in the form of stars, roses and other devices to be purchased in quantities, made of some kind of composition, which may be attached to the corners or sides of flat frames, not otherwise decorated. Ovals are to be procured ready made, and nothing remains to be done save the gilding. In all the mouldings sold for picture-frames, the rabets at the inner side, into which the painting and glass are to be inserted, will be found ready prepared.

The trade of the carver and gilder naturally divides itself into two departments, as the name itself implies; and thus renders a double set of implements and materials essential at the very outset. A work-shop, also, must be found in some part of the home-dwelling for this, as for several other of our "Home Trades." Though by no means very dirty or noisy work, it would not be suitable as a drawing-room occupation.

There are three methods of gilding in reference to picture frames; the mat, or water gilding, the oil, and the burnish. Mat gilding is that dead gold style done on the flat, either applied to the inner and separate portion, immediately surrounding the picture, and frequently leaving an oval opening for it in the centre; or else to the square-made flat exterior part of the frame, the plainness of which may be relieved, if desired, by the affixing of certain decorations at the corners, which may be gilded in like manner.

The appliances absolutely required for the making of the frame itself consist of the following: a mitre-block, mitre shoot, nine-inch tenon saw, trying plane, bradawls and brads of various sizes, carpenters' measure, oil stone, hammer, two-and-a-half-inch vice, at 6s. 6d., glue-pot and brush, and emery paper.

Were further expense no serious object, an iron "mitre machine" might be added to this list—as doing the work more quickly, and perhaps more accurately than by using the vice—the cost of which will amount to two or three pounds. The mitre block and shoot are inexpensive, and can be made by any carpenter. They are made of wood only, and are employed in the work. The trying plane is a large and heavy instrument, but as it is laid always resting upon its side on the mitre-shoot, the weight will not prove a source of difficulty to a woman's hand and wrist.

Before entering into any details of the work I will give an outline of the whole, further particulars respecting each separate branch of the same being given in its proper order of succession:—

1. Mark and saw the mouldings into appropriate lengths in the mitre-block.
 2. Finish ends in mitre-shoot (or machine).
 3. Put together in vice.
 4. Stop holes.
 5. Rub down with emery paper.
 6. Brush over with chrome clay.
 7. Rub down when dry.
 8. Apply two coats of size.
 9. Paint with oil-gold size.
 10. Gild.
 11. Skew off.
 12. Finish with ormolu size.
 13. Colour back with ochre.
- If mat, or water gilding, be required, the work is similar at the commencement, but differs after No. 7, thus:—
8. Apply four coats of mat-size.
 9. Rub down with emery paper.
 10. Wash lightly with sponge.
 11. Apply weak size.
 12. Lay on gold leaf with water.
 13. Relay where the gold is defective.
 14. When dry rub off with wadding.
 15. Apply two coats of size.
 16. Colour back with ochre.

Having selected the moulding, first measure the lengths required for the uprights and horizontals of the frame, and mark them at the short ends of the mitred cuttings respectively. Then take the long portion of the moulding and lay it on the foot of the mitre board, so adjusting the mark upon it as to correspond with the diagonal incision through the upper portion of the board. Into this aperture the saw should be introduced, which will guide it in the severance of the moulding at such an angle as will form a good corner, when united to its fellow piece. Having sawn out the four lengths, you next transfer each successively to the mitre-shoot. This instrument has likewise a projecting foot, but at one side, not facing its employer like the implement before-named. On this foot the plane is laid, with the iron cutter on one side, facing inwards. Sharpen it well on the oil-stone, and then secure it by means of its wedge in the plane; but not too tightly, so as to preclude its adjustment—which is a delicate matter—as the edge must only be just visible, protruding from the flat surface of the plane, when looking along it from one end to the other, held closely to the eye. To make it fall very exactly into the right position strike the upper end of the cutter smartly with the hammer; and when quite true, secure it firmly by striking in the wedge. The shoot has a triangular fixture of wood on the top, formed by the conjunction of two flat pieces, or bars of wood, placed like a *chevron*, or two sides of a triangle, with a section of the sharp angle cut off flush with the raised board to which it is affixed. Against the nearest side of this triangle lay the moulding, adjusting the mitred end towards the plane; hold it firmly with your right hand, and plane with the left. The shoot will have to be turned round for the planing of the opposite ends of

all the four mouldings respectively, and the plane worked with the right hand.

Plane carefully, and examine the ends of the mouldings while working with the plane, to see that the cutting be sharp and clear. If the cutter be at all blunt, the fibres of the wood may be frayed, or even split up at the edges.

Having well finished the mitrings and proved that they will fit together truly with their respective fellows, take one of the long lengths and secure it in the vice, facing upwards; then take a short one and lay it up against the end, so as to form a sharp angle by their connection. Let the extreme edge of the second, or short, half of the chamfered end project in the least possible degree beyond the first, to allow for the hammering in of the brads; hold them securely together, bore two holes for the brads, directing the awl, so as to go through the thickest part of the wood. Then hammer in well, but carefully. The brads should be two-and-a-half-inch ones, for two-inch mouldings.

The frame being put together, the gilding is next to be considered. The appliances requisite for this part of the work must be enumerated. For oil gilding—pipeclay, size, and chrome-yellow mixed; gold-leaf books, from 1s. 3d. upwards to the treble gold; tips (broad, flat squirrels' hair brushes, with short flat handles); "skewing" brushes; white, hard spirit varnish; mat-gold size; emery paper; ormolu (in solution); burnish size; oil sizes; agate burnishers; gold knife; gold cushion, for cutting upon; round bristle and thick camels'-hair brushes; parchment and cotton wool.

Gold books contain twenty-five leaves, each about three inches square; they are counted by the hundred, not by the books. There are many different tones of colour in the gold. The cushion might be home-made. It only consists of a small square, like an ordinary pincushion, made of wood, covered with baize; and, secondly, with chamois or buff leather very tightly sewn over it. At one end there should be a little screen, made of a double piece of parchment, sloping down at each side round the corners, which may be nailed on with broad-headed nails or tacks. This barrier secures the gold-leaf from being blown away. This cushion should have some little straps attached to it underneath, one through which to insert the thumb of the left hand and the knife. Mat-gold size is composed of one part yellow ochre, two of copal varnish, three of linseed oil, four of turpentine, and five of boiled oil. Mix these. The ochre must be previously ground to the finest powder, together with a small quantity of oil, before being blended with the other materials.

When the frame has been put together, it must be "stopped"; that is, all the crevices, and the holes where the brads have been driven in, must be filled in with a stiff compound of whiting and size. Then rub down the whole surface of the frame carefully with emery paper, rather fine in quality. At this stage of the work it must be decided whether mat, otherwise water, or oil gilding be preferred. If the former, it will have the appearance of dead gold, and cannot be burnished. Thus, the dull and bright portions of a frame, if both be united, must be worked in a manner dissimilar the one from the other. Oil gold may bear being carefully washed, treatment to which the burnished can never be subjected.

We will suppose that the frame has been rubbed down for oil-gilding. Give it now a coat of the pipe-clay size, and chrome-yellow mixture, which is of the consistency of paste, and which must be painted on it when boiling, but very smoothly and thinly. When dry, brush size all over it, to prevent its soaking in; and then again polish with the emery paper. Two coats of size must now be applied,

and then put on the oil gold size over-night, and leave that to dry till the morning. This oil gold may be bought in a pot ready-made. It will take about twelve hours to dry sufficiently, and when slightly "tacky," it will be ready for the laying on of the gold leaf.

It is now time that you should collect your gilding materials and tools around you—the cushion, gold-book, gold knife, tip, a saucer of water, and two or three camels' hair brushes of different sizes. Take the cushion in the left hand, together with the gold book, and having calculated the number of "lays" (or layers of gold leaf) required to cover a certain length and width of frame, raise a leaf out of the book by means of the tip—which you must lightly brush over your hair, to give it the very slight degree of greasiness requisite, for attaching the leaf to it for a moment—lay it on the cushion, and cut it into three or four strips. Then dip one of the camel's hair brushes into a saucer of clean water, and wet a small portion of the frame or moulding, extending just beyond the extreme length of the lay about to cover it; then with the tip again slightly stroked over your hair, pick up the lay and place it on the wet spot prepared for it. This will need carefulness, as it must not be put awry. Blow forcibly upon it to disperse any superfluous water from underneath it; and, lastly, press it closely down with a camel's hair brush. When the next lay is to be placed in position, wet the extreme end of the last, when preparing the rest of the foundation for it, and let each successive lay overlap the edge of its predecessor, letting the water flow over it, but carefully guarding against any breakage of the delicate edge. If the overlapping extend about the eighth of an inch it will be sufficient. When the whole is completely covered with gold, stand it aside to dry.

Should the frame be a handsomely decorated one, having a more or less elaborate design, some portions suitable for burnishing will be in bold relief, and some in low—the latter occupying the sunken spaces enclosed within the major parts of the design. To make the gold adhere to these in every little crevice, you must take the large round brush intended for the purpose, and according to the technical phraseology employed in the trade, "skew-off." This means that you should work it round and round with a circular movement of the brush, which will serve to work-in the gold, in a manner which could not be accomplished by any other method. This done, mix about six drops of ormolu in a teacupful of size, and brush it all over the work.

The portions of the design which require to be burnished must now be prepared. Give them two or three coats of burnish size, and then add any scraps of gold leaf where the gilding has been deficient, wetting these spots with water a little beyond their respective margins, as before directed, to make the leaf adhere. Then take a piece of cotton wool, and with a very light touch brush off all loose ends and particles of gold that may cling about the smooth surface. When quite dry, take the burnishers, two or three of slightly differing size and shape respectively, and rub carefully and steadily up and down, to and fro, over the portions to be brightened, with a firm, yet gentle pressure, adapting the curved agates to the form to which they are applied. This is a long and delicate piece of work, over which you must not attempt to hurry. After this has been satisfactorily accomplished, apply either yellow gold-lacquer, or white hard spirit varnish, and then colour the back of the frame with the ochre.

Supposing that you have a frame requiring to be re-gilt, you must first wash it with a sponge dipped in clean water, and when dry make a mixture of water gold-size and thin parchment size, and paint it warm on the frame with a camel's hair brush. When dry,

give a second coat, and when ready rub down with fine sand or emery paper. Then lay on the gold leaf, and stand it for a time to dry more thoroughly, on its edge. When quite firm, dip a fine brush into water, and brush the gold over lightly with it, to remove any loose particles, and if any spots appear to have any deficiency of gold, lay on what is needful, and then give the whole a coat of the

clear parchment size; painting the back of the frame afresh with ochre.

Before concluding I may add a few words on the cleaning of gilt frames. Many a frame has been subjected to the most destructive treatment at the hands of the housemaid, who in washing off fly-marks, has removed all the gilding with them. Damp a small sponge with hot spirits of wine, or tur-

pentine, and, having lightly wiped the gilding with it, leave it to dry. If burnished gilding, dust it with a brush of badger's hair, dip the sponge in gin and water, and pass it very lightly over the surface, drying the gold by mopping it with a silk handkerchief; after which apply the varnish before-named.

S. F. A. CAULFIELD.

THAT AGGRAVATING SCHOOL GIRL.

By the Author of "Wild Kathleen."

CHAPTER X.

"PLEASE GIVE ME A REWARD."

It was a rule at Crofton House that the twenty minutes before the dinner hour should be relaxation time. The girls might spend that little space exactly as they pleased, even in doing absolutely nothing, if they so chose. But there was one privilege especially attached to those twenty minutes which had as much as anything to do with the happy atmosphere usually prevailing in the establishment.

From ten minutes past one until the half-hour the Principal was always quietly seated in her arm-chair in her own study—in the winter beside the fire, in the summer beside the window leading through the wide French glass doors into the garden. And thither anyone of the inmates of her home was welcome to come, from the senior English governess, the next in authority to herself in the house, down to the shock-headed little lad who weeded the gravel-paths and cleaned the boots.

Anyone who was in trouble, perplexity, difficulty, or even disgrace, might claim a hearing from the chief during those invaluable twenty minutes. If two happened to come together, it was established that the younger, and presumably the weaker, had first attention. But, as a rule, the wheels of the establishment ran so smoothly that very frequently for weeks together Miss Crofton would have her twenty minutes as a little quiet breathing interval for herself. The privilege had been made more use of since Miss Edison's arrival than the schoolmistress ever remembered to have been the case during a similar period since its first establishment the year after she set up her school.

To tell the truth, Miss Nellie very much enjoyed a quiet chat with Miss Crofton, for whom her liking was as great as her dislike for Miss Rowe, and she seized every excuse to plead admission during the holiday minutes to the sanctum. Then Miss Rowe had several times claimed an audience to complain of her headstrong pupil, and once Milly Wilmot's rosy, round face had made its appearance, all tear-stained and piteous, to beg off a punishment which she had

incurred through following the mischievous Nellie's leadership. Altogether the patient, hard-worked Principal had begun to resign herself to the expectation of daily visitors, and was accordingly the less disappointed when, soon after she had left little Rose quietly sleeping away some of the effects of her tumble, a tap came to the study door, and was followed by the appearance of



"MY DEAR CHILD, YOU HAD NO RIGHT TO EXCITE PROFESSOR SMITH INTO AGITATION."

Helen Edison's curly dark head. The eyes beneath the curls were not quite so brave as usual in their glances, and the two little slim white hands hung down in front with a copy-book between them.

"Come in," said the Principal. But her voice was very quiet, even stern, in its gravity. Miss Crofton was having a good deal of trouble with this wilful, indulged, only child, and the half-understood matter of the pretended scratch and interruption of one of the master's classes had much annoyed her. She was not disposed to greet her pupil's interruption of her quietude with her usual genial greetings and friendly welcome. However, Helen did not expect smiles just then, so she was not disappointed. She obeyed the "Come in" meekly, and as the schoolmistress

looked at the girl's fine expressive, earnest face, she began to grant a pardon before it was asked.

"I am very sorry I vexed you, madam, by laughing in the class to-day," began Helen, demurely; "but—but—he did look so—funny." And then that mischievous crimson mouth began to unbend and quiver into laughter—that laughter which nearly everyone found themselves so utterly unable to withstand.

Miss Crofton made a vigorous effort at self-control as she said—

"My dear child, you had no right to excite Professor Smith into agitation. You had no right at all, as you well know, to allude to any matters whilst with him outside such as were connected with your studies. How you came to forget yourself so far I cannot understand."

"It was owing to that," replied Helen, opening the book she had brought with her at the cat and dove drawing. Like the Professor, Miss Crofton was for a few moments lost in admiration of the unsuspected genius displayed in the spirited little sketch, whose meaning she read too clearly to need explanation. At last Helen said, quietly—

"I made the sketch in my book without thinking, and then I could not tear it out because of the sums, and when the Professor asked me about it I could not say 'the cat is Miss Rowe,' could I? I did tell him after you had gone out of the room that it was a two-legged cat. I could not do more, I thought."

"I should think not," said Miss Crofton, with a half laugh, which she could not wholly stifle. "I should think not, indeed, as regards saying for whom you meant the cat. But, my dear child, do you not know that your sketch is a proof of a great want of charity? You make Miss Rowe's life far harder for her than it need be. Teaching is very trying and wearying work under any circumstances. But for Miss Rowe it is harder than it would be for many. She has a high, impatient temper, like yourself, which she needs to be perpetually curbing in dealing with even her most docile pupils, and this in itself is very tiring; but you expect her never to be irritable, never to be hasty, never to be