

is taken by a belt of ribbed-knitted wool, which is slipped over the legs, and drawn over the body. All the clothes are first placed one on the other in their proper order together, so that the baby can be laid upon them and they can be fastened in rotation. Linen shirts are quite discarded, and flannel used instead. Some of the clothes have the sleeves arranged to button on the shoulder, thus to avoid bending back the arms, and the painful drag of getting them into the sleeves. A set of this reformed clothing has been invented by a well-known London surgeon, who is connected with one of the first of our children's hospitals. The patterns of this underclothing, cut in the princess shape, can be found at most of the American pattern shops, and I have given a notice of it, as many of our girls are both young wives and mothers, and they must be considered in our monthly chat on dress, into which I am glad to put all mention of clothing on sensible and sanitary principles.

The "housemaid skirt," with its straight folds, lack of gores, and three or four tucks at the edge, seems to be quite as much worn as anything else by all the young girls. It never should be adopted by anyone above twenty, as the plain severity of its outlines is too trying for them. One of the new departures is to have an outside pocket of velvet sewn on to the skirt itself, an old-fashioned idea of long ago. The velvet "Tam o' Shanter" hat is generally worn with this style of costume, and forms a very becoming head-covering for a young girl.

At Cowes, where the yachting season is now in full swing, blue serge forms the nearly universal dress. It is generally made with a kilted skirt, a jacket bodice, and a white waistcoat. With this a round white yachting cap is worn, with a peak of the kind usually worn by gentlemen when yachting. Judging from the illustrations in the weekly illustrated papers, these caps are quite universally adopted. Braid in two colours is used to decorate the blue serge dresses; red and gold and black and white are the favourite mixtures, and the patterns seem to be mostly of the floral order. Assisted by those wonderful transferring designs which can be ironed-off so easily, any of our girls can prepare a pretty braided walking dress for the winter for themselves.

All the newest dresses and jackets are made with very high collars, and the sleeves are put in very high on the shoulders. Black and white striped materials are again much adopted; and the two favourite colours seem to be red and blue, in conjunction. This is particularly the case in woollen materials just now; and blue dotted with red, and red dotted with blue is seen everywhere. A very feeble looking blue, with tiny white dots, is called a "masher blue;" because it was affected by those weak boys for their waistcoats. The very high collars which I have mentioned, straight and rounded off in front, are worn without either collars or cuffs, and have frequently a double piping of white—which supplies their place. A very small amount of white lace is worn as a frill, and it is put on with very little fulness. The colours worn—cream, ivory, twine colour, or white—should be chosen to suit the complexion of the wearer. Cream, with a yellow shade, needs a good complexion, and snow-white may be worn by fair girls, or very clear-skinned people; while an ivory-white is, I think, suitable to all. In Paris, folds of some white material—silk, crape lissé, muslin, both plain and spotted with colour—are used; and a yard cut up will make several yards of double folds, if cut on the bias, and the raw edges bound with a little cheap ribbon.

I must now give some mention of the

novelties of the autumn season in the way of fur garments. Fur capes bid fair to be worn as much as ever this winter, the principal change being that they are now made with a wide and rolled-over coat-collar, and very generally they have the raised shoulders that appeared for the first time last winter when the season was nearly over. They have also rather gained than lost in size, and when they have a fringe of tails added all round them they come below the waist. Many of these capes have the arms defined, and some fur dolmans have long points in front and are short at the back and edged with sealskin ball-fringe. Sealskin paletôts are tight-fitting, and long in the skirt. Some short sealskin jackets for young ladies have appeared, made much on the model of the small jackets, edged with marabout feathers, that our girls have been wearing for the last year.

Muffs seem plain and simple round shapes of fur so far, but they may grow more ornamental by-and-by. Fur-lined cloaks are too useful to be lightly relinquished, so they appear again in full force, and fur-lined paletôts are made of a pretty and elegant shape, with sleeves, and are covered generally on the outside with either French or Indian cashmere.

It is rather difficult to give such illustrations as will show the dress worn at the present moment, as there is really but little change in it; and winter costumes will differ in material, but not in shape. The Zouave-like jacket is illustrated, so that our girls can copy it; and it will be found a useful as well as pretty garment for the autumn. The "Scene at the Sea" gives all the latest styles worn this autumn in addition. The skirt of the figure who wears the "Zouave-jacket" is made with a long puff and a flower, and the figure at her side shows the new method of making serge dresses, with red ribbon bows down the side of the dress.

In the partridge shooting scene are two new travelling cloaks, which have also been produced in waterproofs; and a serge dress, with a "Leonardo hat" of the same material. The "deerstalker hat," as it is called, is copied from one worn lately by the Princess of Wales when going to meet the Prince and their sons with the luncheon baskets.

The three heads are intended to give a clear idea of the present style of hair-dressing. The first has the hair dressed low down on the nape of the neck, and the plaits very closely laid together, and plaited very lightly. The centre head shows the whole hair crêpe, and gathered in a simple manner to the crown, the hair on the nape of the neck being curled in the new manner. This style is admirably suited to girls with hair naturally curling. The last figure has the hair arranged in such a manner that the encircling plaits cover the whole head, save a small curled portion of hair in front. The hair is lightly plaited, and is not arranged very closely on the head; the lines of plaits not quite touching each other. This is to avoid the extreme heat that would be generated by covering the head with so thoroughly non-conducting a material as the human hair, yet, of course, allowing the natural hair to be used as far as possible. This way of dressing the hair may be seen in many of Rubens' pictures, and was worn by his wife, Helena Forman. So it is quite historic, as well as very elegant.

Accordion pleats for dresses bid fair to keep their place during this winter, even though we have all, apparently, taken to plain, or what we are pleased to name, "housemaid skirts."



OUR FRATERNAL SOCIETY.



live in an out-of-the-way part of England, too far from any large town to attend lectures, or even

belong to a lending library. We have not long left school, my brother Charlie and I. Tom and Margaret, the elder ones, have been home a long time, and are quite staid and elderly in their ways, and are very clever; they are all clever but me. I always was the dunce of the family, but I like writing, so they have made me secretary of our society, with instructions to make these notes of our proceedings.

I ought to explain who we all are. Father has something to do with some mines, and there are several young men learning under him, who live up and down the neighbourhood. The only two who have joined our society are Mr. Jowitz and Mr. Danby. I do not like Mr. Danby; he always laughs when I make mistakes, and evidently thinks I am a child, whereas I am nearly seventeen. Then there is the clergyman's daughter, Millie Travers, and another girl friend of ours. And Margaret is engaged to be married to a young doctor in the town (there is a town two miles off, though not a very large one); and he, Dr. Wingate, and his sister Ruth, of course, come here very often; in fact, they suggested the society. But I have not yet explained what it is.

We have formed ourselves into a sort of mutual improvement society, because, as we are out of reach of lectures and classes, we get into the way of never studying anything, and Margaret says she is forgetting all she ever learnt. We called it "The Fraternal," because some of our forefathers had a society of that name, and we thought it was a pity to exert ourselves to invent a new name when there was one ready made.

We have made a regular set of rules about our meetings, which are to be held at our house every Wednesday.

The first Wednesday in the month we have some scientific subject; sometimes chemistry, with experiments; or geology, or botany, or anything else scientific, with specimens or illustrations of the subjects selected. The

second week we have literature. Sometimes we take a period, and read extracts from all the best writers of that time, or else we take the life of one author and read some of his works. The third evening we take music, and have the lives of musicians, or the styles of music in different lands, or at different periods, with so many illustrations that it generally resolves itself into a regular musical evening. The fourth meeting is devoted to the study of common things. Dr. Wingate suggested that I believe he really thought of it for the benefit of us younger ones, who have not much opportunity of distinguishing ourselves on the other evenings; but when I accused him of it he only laughed, and said his reason was that people try to be so learned about out-of-the-way things, while very often they are perfectly ignorant about things that come in their way constantly.

Every Wednesday the members are to take it in turns to write papers, two for each week, or else to give a kind of lecture on the subject selected, and anybody who fails to do so has to pay a fine of sixpence. The papers are only to occupy a quarter of an hour each, and afterwards the meeting is invited to discuss the subject, and, what is much worse, criticise the paper or lecture. But it is not so alarming as it sounds, for there are only ten members, and we are all great friends.

Well, as I said before, they have made me secretary, and requested me to take notes of all the proceedings, and keep them till the end of the year, so that we can look over what we have done, and see if we have really gained any information, or done ourselves any good by the society.

We had our first meeting a month ago. As the subject was to be something botanical, Dr. Wingate read a very interesting paper on fungi, and brought a beautiful collection of specimens. It was fortunate that it was written, for I could not possibly have taken notes, there was so much in it. The next week we had the poets of the present reign. The third Wednesday we took the history of English stringed instruments.

But the evenings for "common things" are the ones which most particularly concern me, as my turn always comes then to provide a paper. Our subject last night, the first of these evenings, was "The Contents of a Cruet."

I selected mustard, because, having been to the Health Exhibition, I had seen it made. The principal facts I collected about it were that, instead of being quite a modern thing, as I imagined, it was used as a medicine long before the time of Christ; the oil extracted from it being rubbed on as a cure for rheumatic affections, and mixed with some other things, as a remedy for the stings of serpents; but it was also used as a condiment in Eastern countries at a very early date. It was in use in England, too, even by the Saxons, but not in its present form; first, it was mixed with honey and vinegar, and, after people ceased to use those additions, the seed was only roughly pounded in a mortar, and passed through a sieve to remove the outer skin. It was only in the reign of George I. that some one thought of the present method of carefully grinding the seed, and separating it from the husk in the same way as is done with wheat.

There are several varieties of the mustard plant, but the two used in England are the black and the white mustard. The former is a tall annual, with bright yellow flowers, followed by seed-pods half an inch long, containing reddish-brown seeds. The mustard mentioned in the Bible is generally supposed to be this species, as it grows in Palestine to a height of about fifteen feet.

The seed-pod of the white mustard is much larger than that of the black, and the seeds themselves are large and of a bright yellow colour. They are the seed leaves of this

variety which are used in the salading commonly known as "mustard and cress," or "small cress."

In the modern system of mustard-making these two varieties are mixed together; the black contributing a volatile oil containing sulphur and nitrogen, which supplies the pungent flavour, while the white add the necessary acrid taste. This pungent oil is not developed till the mustard is moistened; when dry it is comparatively flavourless, but the addition of cold or luke-warm water sets up a kind of fermentation, which brings out the pungency.

My paper was not received with the enthusiasm I felt it deserved, as it was rather short, but it was fortunate that it was so, for Charlie had a huge pile of papers before him, and was anxiously waiting for me to finish to begin his subject—salt.

Before he began, however, Millie Travers said she had not had time to write a paper the previous week, when it was her turn, so she had collected a few short facts about pepper. She says that black and white pepper are both prepared from the same source, the berries of a climbing shrub which grows about ten feet high, and is cultivated chiefly in the East and West Indies. These berries grow in long clusters, like bunches of tiny grapes, and are green at first, but when ripe become a bright red. As soon as they have assumed this colour the peppercorns are gathered and dried in the sun till they shrivel up and turn black, and are sold in the shops, in that form, as black or white pepper. The white pepper is produced by leaving the peppercorns for a few days to dry in a shady place, instead of in the bright sun, and then soaking them, and rubbing off the outer fleshy part of the berries in the hands. The inner white seed is then carefully dried and ground.

Cayenne pepper is a different thing altogether, and is not, strictly speaking, pepper at all. It is procured by drying and grinding to powder the seed-pods of a shrub, the capsicum, which, like the real pepper, is chiefly grown in the East and West Indies.

When Millie had done, Charlie began by informing us of the different methods of procuring salt.

In some countries, particularly those in Southern Europe, where they have a very hot sun, salt is still obtained by the method employed centuries ago. They fill large open pits—salt-pans, as they are called—with seawater, which is allowed to remain there till the water is evaporated by the heat of the sun, leaving a sediment of salt behind. This is scraped out, and stacked in pyramids by the side of the "pans," till it is thoroughly dry, when it is carted away for use.

In England it is procured either from brine springs or from salt mines, of which there are about twenty-five in England, the most important at Northwich and Droitwich.

That obtained from the brine pits is run into large reservoirs, about eighty feet long and two feet deep, and evaporated like the seawater mentioned above, but instead of being left to the action of the sun, large fires are lighted underneath, the heat from which causes the water to evaporate so quickly that the salt can be raked out two or three times a day. It is taken out with large shovels, and put into moulds and carried into a large oven to dry; after which it is turned out in the large square blocks in which we see the coarse kinds of salt sold. The varying fineness of the salt we get depends upon the length of time the evaporation has taken. The pyramid-shaped crystals of salt float on the top of the brine at first, then sink to the bottom; and if the heat is small, and, consequently, the evaporation takes a long time, these crystals adhere together and form cubes, whereas, if the temperature is kept at boiling point (as is done for fine table salt),

the water evaporates so quickly that the crystals are removed from the pan before they have time to increase in size.

The rock salt is procured by the usual methods of sinking mines, and blasting out the large masses of salt. The greatest difficulty met with is that when a shaft into the mine is sunk through salt, if the greatest care is not taken, fresh water gets in and dissolves the surrounding salt, to which the casing of the shaft is fixed, and the whole thing collapses. In order to prevent this, a roof is made over the opening of the shaft, to keep out the rain, but no amount of care prevents an occasional accident. Inside the mine the roof is supported by pillars of different sizes, but generally about six to ten yards square, and about twenty-five yards apart. Comparatively little of this rock salt is used in England; the large proportion of it is exported to the Continent.

Rock salt is found in strata, chiefly in the new red sandstone and Bunter sandstone, and is supposed to have been originally produced by the slow evaporation of salt lakes and inland seas.

Salt is the only British mineral used as food. There is no part of the world in which it is not used; and it is one of the few things which men and animals alike agree in eating. Nearly all the higher animals have a natural craving for it, and in a wild state will travel long distances in search of the patches of salt earth which are found in most countries; while animals kept in confinement are always found to thrive better if provided with a lump of rock salt to lick.

This was all Charlie's information; but Dr. Wingate added the fact that salt is a very valuable aid to digestion, and it is so important a part of the whole human structure, that it is found in every fluid and every solid part of the body. He told us some dreadful stories, too, about criminals in some foreign country—Holland, I believe—being sometimes put to death, in olden days, by being kept in close confinement, and deprived of any salt with their scanty food, which very soon caused their death.

Margaret always has something out of the Bible appropriate to every subject, so we quite expected her to quote something now; and she did not dissappoint us. She said that it was interesting, as a proof of the use of salt from the earliest times, to see that it is mentioned in the book of Job, which is generally supposed to be the oldest book in the Bible. In the 6th chapter Job says: "Can that which is unsavoury be eaten without salt?" which shows that he was in the habit of eating it. She said also that salt, such as we use now, does not lose its taste, but that to which our Lord alluded, as losing its savour, was probably the kind in common use then, obtained by the evaporation of sea water, which does become almost useless when impure and exposed to the air. There are a great many other allusions to salt in the Bible, but these are the only two of any special importance.

Mr. Danby, who has a hobby for derivations, said he wished to call the attention of the company to the fact that our word salary is derived from the fact that the Roman soldiers were partly paid in salt; hence their pay was spoken of as their "salarium," and from this we derive our modern salary. He also requested us to notice the fact that the names of all the chief salt-producing towns end in "wich," such as Northwich, Droitwich, Nantwich, Shirleywich, and many others.

(To be concluded.)



OUR FRATERNAL SOCIETY;

OR, WHAT THE HEALTH EXHIBITION HAS TAUGHT US.

By DORA HOPE.

On my first visit to the Health Exhibition I noticed that while some parts of the place were comparatively empty, others are always thronged with people from morning till night. Of course, as one would naturally expect, this was the case with the Old London street, and the Chinese Court, and all the departments where the attendants were particularly interesting foreigners, but nowhere was there a more unflinching crowd than in the building where the manufacture of sweets was shown. I must confess to a special interest in that department myself, as I have not yet reached the age when people pretend not to care for sweets; and I felt it my duty to try samples of the various kinds offered for sale near the machinery, to see if they really were as wholesome as the makers say they are. My only regret about them was that we left London too soon to give them as long a trial as I should have liked. Happily for me, Dr. Wingate generally brings me some sweets from town, when he comes to see Margaret, so I am able to continue my experiments; and when it was my turn to choose a subject for the "Health Exhibition" evening of our Fraternal Society, he suggested that I should improve my knowledge of my favourite diet, and take for our subject the making of sweets.

I decided that I would read a paper about chocolate; and Charlie ought to have read another, but he said the subject, being related to cooking, was only suited for girls, so Millie Travers and her friend Jeanie Maclaren took his turn; but instead of writing a proper paper, they only gave all the information they had been able to get from notes, which they afterwards gave me to condense into this report.

They say that the refined sugar is the basis of all the best sweets; the loaves of sugar are broken up by a machine, then boiled, mixed with a solution of gum arabic. When rose, musk, peppermint, or any other lozenges are to be made, the flavouring is now added, and another machine mixes the paste thoroughly, then rolls it out to the required thickness and cuts it into the various shapes.

The making of boiled sugar sweets, such as almond rock, and the ordinary transparent sugar ones, barley sugar drops, and such like, was one of the most interesting operations to be seen in the sweet department of the Health Exhibition. They are made of sugar boiled to a thick syrup; this is poured out upon an oiled slab of marble or steel, and both the colouring and flavouring poured upon it; and if any other ingredients, such as cocoa-nut chips or almonds, are required, they are added now also. The maker then turns the liquid sugar over with a shovel, and thoroughly mixes and kneads it with his hands, and works it with his knuckles just as though he were making bread. When it is thoroughly mixed and so far cooled as to adhere firmly together, though not too stiff to work with the hands, another assistant works it out into a flat cake, and cuts off strips of a convenient width with a huge pair of scissors. These strips are passed to the sweet-maker, who passes them through a machine like a diminutive mangle, only that the rollers are cut into various devices so that the mass emerges stamped out into sweets, but it is not quite cut through, so that it can be drawn out of the "mangle" in a sheet, and the cutting completed with a knife. Of course for almond hardbake, and sweets of that kind, the stamped rollers are not used; the kneaded sugar is only rolled out to the required thickness, and broken up into convenient pieces.

Comfits of all kinds, that is to say sweets with a seed or fruit inside, are rather

differently made. The seeds, carraway for instance, are well washed, then dried and put into a large revolving copper pan, which is warmed by steam, and which keeps the seeds shaking slowly round and round all the time. In the case of almonds, a solution of gum is thrown over them first, and they continue to revolve till the seeds are partly dry. In the cheaper kinds of sweets a good deal of starch is now added with the boiled sugar, but for the best quality pure sugar is used. This is thrown over the seeds, and as they are rolled round in it the sugar is gradually coated over them, and the process is continued till they have attained the proper size; fresh sugar being added to the pan as required. The cores of these sweets are either carraway or coriander seeds, or sweet almonds. In all cases they are washed and carefully dried, and used immediately.

As I explained before, the members are allowed to make remarks or ask questions, and Charlie took advantage of this to inquire what the seeds are which Millie mentioned as being the core of comfits. Poor Millie was not prepared for questions, and had to confess she did not know; but Mr. Jowitt, who is a great botanist, and always knows about everything connected with plants, helped her out of the difficulty. He said that the carraway is a biennial plant belonging to the hemlock family, with a white or pale bluish-coloured blossom, and a root like a small parsnip; indeed, it was at one time boiled and eaten in the same way. It was probably introduced into England by the Romans, who used it a good deal in cooking. The flower is succeeded by two oblong seeds, which are thrashed out when the plant is cut down, generally about July.

The coriander plant, he said, is closely allied to the carraway; it belongs to the same family, and, like it, yields an aromatic volatile oil. It bears a bunch of pale pink flowers, and has very aromatic leaves, which are used in some countries in salads and soups. It is cultivated in England for confectionery purposes; chiefly in Essex.

The almond, he said, was too well known to need description, but he mentioned that they are chiefly imported from Spain and the South of France. Sweet and bitter almonds are produced by different varieties of the same tree.

I felt rather nervous when I was called upon to read my paper on chocolate; but I had taken a great deal of trouble to collect all the information, and flattered myself it was rather interesting. The illustrations would have been weak, as I had only been able to find one picture of the cocoa tree, but Dr. Wingate as usual came to the rescue, and supplied me with a variety of chocolates to hand round at intervals, a practical way of illustrating the subject which seemed to be appreciated. There are some advantages after all in one's sister being engaged. I may as well give my paper just as I wrote it, as I do not suppose I could improve upon it.

"Chocolate is made from the seeds of the Theobroma Cacao, a tree which is cultivated chiefly in the West Indies and South America, though lately it has been grown in Ceylon also. In appearance it very much resembles a young cherry tree. It bears a pale yellow flower, followed by a green cucumber-shaped fruit pod, which, as it ripens, becomes of a reddish purple colour. These fruit-pods each contain about twenty nuts, the size and shape of a kidney bean, covered with a thin dry skin. They have a sweet taste, and are not unpleasant eating, though the taste of Europeans generally wants educating in order to appreciate them, but they are sometimes used as food by the natives of South America. At one time they were used as money in Mexico. Humboldt says that six were equivalent to one halfpenny in his time.

"As soon as the pods are ripe they are

gathered, cut open, and the nuts or beans, as they are generally called, taken out and dried in the sun, after which they are sent to the chocolate factories of Europe without any further treatment.

"At the manufactory the beans are roasted for about an hour in a huge iron cylinder, which is kept revolving continually over a coke fire. They are taken out as soon as the aroma of cocoa is perceptible. After this the external skin is easily removed. This is done by sifting and winnowing them in the 'kibbling mill.' They are crushed into coarse fragments, then the husks are blown away by a powerful current of air, but they are again sifted in small quantities in hand sieves, by girls, who remove any discoloured beans or fragments of husk. Great care is needed that this operation shall be thoroughly performed, as the outer skin is considered very indigestible. In this form the beans are sold in the shops as cocoa nibs. Some manufacturers keep the beans a long time before using, as the flavour is said to improve by keeping. In the French factories they are kept for two years, and in the French gallery of the Health Exhibition large paintings were shown illustrating the great care which is taken to keep the beans cool, and keep out all dust. Air can only enter the storage rooms through a well, with water at the bottom of it, and sheets of wet linen revolving in this well intercept every particle of dust as the air blows over it.

"The next step in the manufacture of chocolate is the further crushing of the nibs. This is done, as could be seen at the Exhibition, in a mill with a granite bottom and rollers, kept hot by steam. This presses out the natural oil which the bean contains, and converts the whole into a liquid paste, which flows off through a tube into a large tin tray prepared for it. It is next put into the 'mixer' with white sugar, which absorbs the oil and reduces the mixture to a tolerably firm paste. The flavouring is now added, and the chocolate undergoes a still further mixing in another machine, and finally is kneaded by hand, just like dough, in order to squeeze out the bubbles of air. If this part of the work is carelessly performed, and the air is not all expelled, the pieces of chocolate will crack and break when cold.

"The operation of making the chocolate into the various shapes for selling is all performed by machinery. It is passed between rollers which squeeze it to the required thickness, and then stamped in another machine to the right size and shape, and in some cases the name of the maker impressed upon each piece. The machine deposits the pieces of chocolate as it stamps them, in regular rows upon iron trays, which are quickly removed as soon as they are filled by the chocolate maker, who puts them into a refrigerator for some hours, and this cooling completes the whole process. The sticks and other large pieces of chocolate are not stamped in this way in a machine, but the paste is pressed into moulds after the kneading, and then into the refrigerator without passing through another machine at all." As soon as I ceased I was confronted by a question as to why the product of the cacao tree should be called chocolate. Happily I knew, and was able to inform the company that the beverage, chocolate, though it was not known in England till the reign of James I., was so highly appreciated in other countries that Linnæus gave to the tree from which it is obtained its present name "Theobroma," that is "Food for the Gods;" and on its introduction into England the beverage was called Chocolat, the name under which it had for generations been known to the natives of Mexico, the final "l" being soon dropped from the difficulty of pronouncing it.

(To be continued.)

OUR FRATERNAL SOCIETY.

By DORA HOPE

MILK PUDDINGS.

OUR society has lost a member. Millie Travers has gone to London to spend the rest of the summer with relatives there. We are going to make a virtue of necessity, however, and elect her a "corresponding member" of the society. We were talking over our meetings before she went, and some one suggested that we ought to have learnt something useful from the Health Exhibition; so we have decided that on our evenings for "common things" we will give our recollections of anything interesting or practically useful we saw there. In addition to this we are to give Millie notice of the subject chosen, and she and her cousin will study it on the spot, and send us their notes.

The subject chosen for this month was the making of milk puddings, or rather, the mealy ingredients of which they are made. We sent Millie Travers notice of the subject, and she writes that there is so much information to be obtained on this subject at the Health Exhibition, not only from the exhibits themselves, but also from the books in the library connected with the place, that she hardly knew where to begin.

The farinaceous foods most commonly used (excepting rice, the commonest of all) are divided into three classes—those obtained from the roots and pith of trees, preparations of wheat, and those prepared from maize or Indian corn. To the first class belong sago, tapioca, and arrowroot. The two last are prepared from the root stocks of plants, and both are obtained in almost exactly the same way, but from different plants. Tapioca is from various shrubs, but chiefly from the cassava, a native of South America. Its roots, which resemble a cluster of large turnips, are constantly used as food, both in South America and on the west coast of Africa; in the latter district the people are said to have fifty different ways of cooking them. In America the roots are generally sliced and dried, and eaten as cassava bread, or else pounded, and the meal made into thin round cakes. When fresh the root tastes like watery potatoes, and is a deadly poison, both to man and beast; but the poisonous juices are easily driven off by heat, so the slices of root are always baked or heated in some way before being eaten.

To obtain tapioca, the roots are broken and bruised in mortars or by machinery, then washed, and during this process the starch sinks to the bottom of the vessel, so that it is easily collected in sieves, and finished by drying on hot plates. Millie says this heat rather interferes with the nutritious properties of the tapioca, but it is necessary to get rid of the poisonous juices.

She reminded us that in Lady Brassey's exhibit at the Health Exhibition there was a beautiful mat from Tahiti, made entirely from arrowroot fibre, plaited and twisted into a wreath of flowers and leaves, surrounding a flat centre.

The roots of the "Maranta," from which arrowroot is obtained, are very fibrous, and the skin has an extremely unpleasant taste, so that they have to be carefully peeled before being pounded and washed, like tapioca. Pure arrowroot is very expensive, and consequently is frequently adulterated. There was a large stand at the Exhibition entirely of adulterated food, showing how much and what kind of substances are generally mixed with each so-called pure food. These adulterations are not necessarily injurious—in fact, they are sometimes more nutritious than the original substance itself. This is especially the case with arrowroot, which has very little nourishment

in itself, but is mixed with wheat, potato, and maize flour. It is easy to detect adulteration with wheat flour, as when boiled a foam will rise and remain upon the surface of the water, which would not happen with pure arrowroot.

Like tapioca and arrowroot, sago is almost pure starch, but this is obtained not from roots, but from the pith of the sagus and several other kinds of palms, which was cultivated chiefly in India and Ceylon. To procure it the trees are cut down and split open, and the pith washed and dried, like tapioca, when the sago is found to have taken the form of small round grains. These grains are very hard, but absorb water readily, so that they are easily softened by cooking.

Millie said the "corresponding member" could not be expected to do all the work, and that we must ask Dr. Wingate for any information we wanted on the value as food of these different substances, as she had found it too wide and deep a subject to begin upon.

Dr. Wingate did not seem at all disconcerted at the request, and said we had better finish these three substances before going on with Millie's notes. He says that the nutritious value of all three is practically equal, and very small indeed. They are really very little but starch, and are consequently very inferior to wheat, and even to rice. He says it is a great pity some nurses are so fond of feeding invalids on arrowroot, and expect them to get strong on it; it is valuable as a quickly-made restorative, and as a vehicle for giving wine and other things, but it is simply starch and water, and there is nothing in it to build up an enfeebled body.

Millie's next set of notes were about the farinaceous foods prepared from Indian corn, such as hominy, oswego, and corn-flour. The whole grain, when well ground, is very nutritious and easily digested—in fact, it is so fattening that it is used to feed Strasburg geese for the sake of the "foie gras." Most people, however, dislike the peculiar flavour of the outer skin of the grain; but as it can be removed by treating the corn with a weak solution of caustic soda, this is the first step in the preparation of hominy, and the other forms in which maize is chiefly used.

Dr. Wingate added that the three preparations are almost equally nourishing, and stand very high in the list of nutritious foods; they possess just the qualities, heat-giving and fat-forming, which are lacking in the starchy foods mentioned before.

At the Health Exhibition there were large cases, showing all the different substances of which various foods are formed. In the cabinet devoted to maize there was one pound of the corn itself, then a number of saucers containing the various ingredients which that pound consists of when separated into its different elements. The first saucer contains 10 oz. of starch, the next $\frac{3}{4}$ oz. of fat, another the same quantity of cellulose and nearly $1\frac{1}{2}$ oz. of fibrine, besides smaller quantities of valuable mineral salts and other things.

The last class, including semolina, macaroni, and vermicelli, are made from wheat. They are prepared in sunny climates, such as Spain and the South of Italy, where the absence of rain makes the corn ripen very hard and dry. Semolina is simply the best of the wheat ground between millstones set a little distance apart, so that the central part of the grain is left in a granular form. This is used a great deal in cookery in southern lands. In Italy it is used in the preparation of the national dish, polenta; and in Algeria it is mixed with butter, vegetables, and fowl, to make the favourite food, couscoucous.

Macaroni is the same hard wheat, ground into very fine flour. This is made into a paste with hot water, then either pressed through round holes in a metal plate like a colander,

for pipe macaroni, or else stamped into the desired shape by machinery, and then gently dried.

It has for generations been the chief food of Southern Italy, and is cooked in an endless variety of ways. In Naples it is sold ready cooked, in the streets, as baked potatoes are in poor districts in England; the people who buy it pick up the long pieces dexterously in their fingers, and manage to convey it to their mouths in a manner which is more adroit than elegant.

Vermicelli is only a finer kind of macaroni. Dr. Wingate says all these preparations of wheat are very nourishing and valuable food, but that to some people pipe macaroni is rather indigestible, because of being so very close.

I had been wanting all the time to ask a question about macaroni, but was afraid of being laughed at. Charlie is very fond of whistling—

"Yankee Doodle went to town
Upon a little pony;
He stuck a feather in his cap,
And called it macaroni."

and I have been wondering ever since the subject of milk puddings was suggested what the meaning of that line could be. Happily Mr. Danby had heard Charlie too, and had been puzzled by the very same thing, but he had been trying to find an explanation. All he had been able to discover, however, was a suggestion in a volume of the *Spectator*, that all nations call gay young men by the name of their favourite dish—as they were at one time called Jackpuddings in England, Jean Potage in France, Pickled Herrings in Holland, and, in the same way, Macaroni in Italy.

He believed the way the name was introduced into English was that about a century ago a number of gay young men who had travelled abroad—an uncommon thing in those days—formed themselves into a club, and, amongst other foreign dishes, always had macaroni at their dinners. As this was quite a new dish to English people, they gave the society the name of the "Macaroni Club," and all young men who aped the gay ways of its members were dubbed "macaronis."

The word itself, Mr. Danby says, is generally supposed to be derived from some Greek words, meaning the "feast of the happy."

In Millie's paper she makes no mention of rice, beyond the fact that in several of the seed growers' exhibits there were bottles of the different kinds of rice from various parts of the world, she was surprised at the many different colours of the grain; they vary from nearly black to dark red, pink, and quite white.

She says, too, that in the stand of different foods, which she mentioned in connection with maize, the saucers of the contents of 1 lb of rice show nearly $12\frac{1}{2}$ oz. of starch, with only 35 grains of fat; which she says looks like a scrap of lard; and rather more than 1 oz. of fibrine, which resembles chips of gum arabic.

But my father lived for some years in India, and knows all about rice growing, so we made an exception to our rule of admitting no elders to the society, and made him a member "for one night only," that he might tell us what he knew about the subject.

He says that rice is an aquatic grass, which grows wild in marshy places in Madras, though, like all other wild plants, this is very small and poor compared with the cultivated varieties. It is grown now in nearly all tropical countries, but probably its native land was India. One would imagine so, at any rate, from the name, which is traced back to the Tamil "Arisi" and the Arabic "Aruz."

It is called "paddy" in India, and the fields where it is grown "paddy fields." At first the fields are flooded with water at regular

intervals, as the rice will not grow without a constantly wet soil. When the grain is formed in the ear, the water is all drained off the field to allow the rice to ripen. Father says that when the tender green shoots of the young rice plant cover the ground a paddy field is one of the most beautiful sights in India. When ripe it looks more like a field of barley than anything else we see in England; the grain is enclosed in a rough yellow husk, and most varieties have a spike at the end, like barley.

When ripe it is cut with a sickle, made into shocks, and stacked like wheat. The chief difficulty in preparing rice for the market is to remove the husk without breaking the grain, as it adheres so closely. Different methods are employed for the different kinds of rice; the one most commonly used is a machine with millstones at slight distances apart, so that in passing between them the husk is cracked without injuring the grain. When all the husk has been winnowed away the grain has still to be passed through another machine to remove the inner coloured skin, and whiten the rice. Then the sifting begins, a process which has to be performed several times, so as to separate first the broken fragments of rice, then the smaller whole grains, finally leaving behind only the prime part of the crop, the large unbroken grains. But father added, for the benefit of Margaret and the other housekeepers, that the rice from the last two siftings before the final one is quite as good and wholesome as the large grains. It is sold in the English shops as "broken rice," at a much lower price than the finest grain, and for puddings and any purposes where the size of grain is not of much consequence, answers quite as well. He advised, too, that it should always be steamed, not boiled, as the latter process wastes some of the important substances in which rice is already deficient.

As I explained at the beginning of our meetings, Margaret has a very inquiring mind, and father's observations set her off asking how much nourishment there is in rice.

He says there is not nearly so much nourishment in it as in wheat; but for all that, it is the principal, almost the only, food of one-third of the whole human race. At least a hundred millions of people in hot countries chiefly subsist upon it. He thinks the reason it is so little used as food by people of cold countries is that, although it contains the elements necessary to actually support life, there is very little in it to produce either heat or to build up muscle or nerve, both of which are very necessary in cold climates, where people take a great deal of active exercise. In the hot countries, where rice is the chief food, no heat-giving properties are required, and people as far as possible avoid all physical exertion, so that they do not require force-producing food either. It is interesting to notice as the distance from the equator increases, and the heat consequently becomes less, how other more heat-giving foods are gradually added to the rice in the ordinary diet of the people, till in the cold climates its use is almost unknown except as an occasional dish.

Father told us that once, when travelling in Southern India, he asked a peasant about some other man, whether he was very badly off. "Oh, no," replied the peasant, "he eats rice twice a-day." Father could not understand what he meant, till the friend he was travelling with explained that rice is so much a necessary of life to people in that part of India, that they judge of a man's condition of life by the number of times a-day he can afford to eat it.

Rice is connected with a great many religious ceremonies in India, too. When a Hindoo dies, his family, and all who wish to claim relationship with him, perform a solemn

ceremony of offering a ball of rice to his departed spirit, while a regular form of prayers is repeated. A devout Hindoo performs daily five acts of worship, one of which is to repeat a prayer while scattering grains of rice before his door.

Millie Travers also mentioned in one of her letters that she had tried to make a dinner at the Chinese restaurant, and had found the great difficulty of eating a bowl of rice with no implements but chop sticks. "It is a hopeless mystery to me," she says, "how hundreds of thousands of them can live, as they say they do, on rice eaten in that way. I should have thought such an ancient nation might at least have evolved a spoon by this time."

(To be continued.)

VARIETIES.

WHAT IS A COQUETTE.—A coquette is a young lady of more beauty than sense; more accomplishments than learning; more charms of person than graces of mind; more admirers than friends; more fools for attendants than wise men.

PUT MONEY IN THY PURSE.—When Robert Southey, the poet, was in Lisbon, he saw his countrymen conducting themselves in the true spirit of commerce. One merchant told him how closely he attended to profits. "I never pay a porter," said he, "for bringing a burden till the next day; for while the fellow feels his back ache with the weight, he charges high; but when he comes the next day the feeling is gone and he asks only half the money." The author of this mean trick was worth two hundred thousand pounds!

THE SUM OF DUTY.

The sum of duty let two words contain,
Oh, may they graven on thy heart remain!—
Be humble and be just.—*Prior.*

WOMAN'S TASTE.—For the proper ordering of a household every woman needs a cultivated taste, and her education should include very careful attention to this point. It is one of the duties of women to beautify, to ornament the world, and especially their own homes and their own persons, and the woman whose taste does not enable her to dress becomingly, to arrange the furniture and ornaments of her rooms tastefully, and generally to give a touch of seamliness to that part of the world with which she has to do, misses and fails in a part of her work to her own loss and that of all other persons with whom she comes in contact.

LAZINESS ON HIS TRAVELS.—Laziness travels so slowly that poverty soon overtakes him.—*Franklin.*

OUR OWN OBSERVATIONS.

To observation which ourselves we make
We grow more partial for the observer's sake.
—*Pope.*

FOR LOVERS OF ART.—Pre-Raphaelitism is a word we often meet with, but of its meaning many of us have only a hazy notion. The following explanation by Mr. Ruskin is therefore likely to be useful. "Pre-Raphaelitism has but one principle, that of uncompromising truth in all that it does, obtained by working everything, down to the most minute detail, from nature, and from nature only. Or, where imagination is necessarily trusted to, by always endeavouring to conceive a fact as it really was likely to have happened, rather

than as it most prettily might have happened. Every pre-Raphaelite landscape background is painted to the last touch, in the open air, from the thing itself. Every pre-Raphaelite figure, however studied in expression, is a true portrait of some living person. Every minute accessory is painted in the same manner. . . . This is the main principle of pre-Raphaelitism."

READING AND REFLECTING.—She who loves to read, and knows how to reflect, has laid by a perpetual feast for her old age.

AN EVENING DUTY.—Recollect every day the things seen, heard, or read, which make any addition to our understanding.—*Watts.*

DOUBLE ACROSTIC.

A touching Story, poetry in prose,
Of sister's sacrifice, her love, her woes;
The gifted Author of the tale (unlike
His witty countrymen) need not to strike
One single word from out one single line—
Such purity doth all his thoughts enshrine.

- O'er broad alluvial plains, through forests dense,
He roam'd, a freeman, till the Roman came;
And while he hunted o'er these tracts immense,
The appellation was of both the same.
- Poor Queen! in suff'ring old—in years a child;
Torn from thy husband's arms by priestly force;
Thy beauty marr'd, to the far west exil'd,
Then murder'd, without fear, without remorse.
- The Elksomite, who prophesied the fall
Of that proud city whose iniquities
Had reached their height, and yet who held in thrall
The foremost of the ancient monarchies.
- Sweet Nymph of solitude! Thy name reveals
The prudent king (tradition so records)
Who sought thy grove, apart from city brawls,
To muse alone and frame his acts and words.
- Long centuries ago, in Russia reign'd
A brave Grand Duke, who boldly overcame
His various enemies, and so obtain'd
An increase of dominion and of fame.
His dying counsel to his sons was this:
"Guilty or innocent, shed no man's blood.
"Fast—pilgrimage—condones not what's amiss";
"For nought avails but actions just and good."
- A well-known Epithet denotes the place,
A simple village, where the man was born
Who wrought the guiltiest deed of human race,
To his eternal shame and mankind's scorn.
- The Turkish Title for a man of rank.
- A harmless, mild Enthusiast, who relies
For food on fruits or herbs; the beasts may thank
His mercy that for him no creature dies.
- The village Maid, who sought the youth she lov'd
By wilderness and forest, stream and plain;
Unceasingly, untiringly she roav'd,
Hoping 'gainst hope to meet him yet again.
He sought her also: year by year rolled on—
And youth and hope and energy were past;
Till, when the light of life was almost gone,
She found him, dying, in an hospital at last.

XIMENA.

A REVERIE IN ST. JAMES'S HALL.

By CLARA THWAITES.

I've faltered on the threshold
Of music's shadowy land,
I've caught melodious echoes
That floated from the strand,
And airy hands have beckoned
Its unknown heights to reach,
And tender voices called me
To learn its mystic speech.

Unfold, O sweet musicians,
Your secret art to me,
Fling open to me freely
The gates of harmony!
Through music's silver portals
I step with reverent tread,
Through corridors enchanted
And dim, I'm softly led.

And now a strain familiar
I hear with rapturous thrill—
A master hand interprets
With all-transforming skill.
How could I miss the meaning
Of those pathetic chords,
And lose their tender message?
They are not sounds, but words!

Through all the wailing minors
A noble purpose ran;
Alas! I failed to follow
The earnest master's plan!

What musical unfoldings
Of life, and joy, and pain
Are in that closing passage,
That last triumphant strain!

Oh, when the faltering preludes
Of this poor life are o'er,
And harmony unbroken
Rings from th' Eternal shore;
When love divine interprets
The past with patient touch,
Shall we not own life's music
Had not one note too much?

Through intermingled concords
One purpose we discern,
Though we, impatient children,
Were dull and slow to learn.
But sweet interpretations
The veil will then uplift,
And we shall own that sorrow
Was love's supremest gift.

We cannot read life's meaning—
We hear not all the parts—
But it shall be unfolded
To our expectant hearts.
A Master-hand will fashion
To tuneful part His throng,
And we shall be for ever
Beneath His hand for song.

OUR FRATERNAL SOCIETY.

By DORA HOPE.

SPICES.

At the beginning of our last meeting, Margaret gave us an interesting little history of the use of spices in general.

Nothing is known of how they first came into use, but they have been greatly esteemed from the very earliest times; and a small quantity of spice was considered a present worthy of being offered to a king. The Queen of Sheba brought gold, spices, and precious stones as her offering to Solomon; and the difficulty in obtaining them is clear from the statement that "there came no more such abundance of spices" as those she brought; although, as we are told in the same chapter, the king had his own spice merchants, and he also compelled all the kings subject to him to pay part of their yearly tribute in spices. None of the spice-bearing trees grew in Palestine, so all had to be brought from long distances, probably many of them, such as cassia and cinnamon, from China. In the Bible, "frankincense" is often used as a general term for all Eastern spices. They were chiefly required for the compounding of the perfumes so universally used by all Eastern nations.

Coming down to later days, in the early history of England the "Spicery" was a special department of the Court, with its own officers. Spices were rare and costly, and were chiefly imported from the Levant. Though not in common use, owing to their costliness, Chaucer alludes to them in a way which proves that they were well known and valued. He speaks of nutmegs, cloves

(cloves), macys (mace), canella (cinnamon), and ginger.

Dr. Wingate added that spices contain a considerable quantity of volatile oil, and so act as stimulants. As a rule, a small quantity is beneficial, as their stimulating properties assist digestion, while giving a relish to food, and sharpening the appetite. Nutmeg, especially, is very heating and stimulating, and should not be used by persons of apoplectic tendencies. Mace has the same properties, but to a much smaller extent. Cloves contain 20 per cent. of aromatic volatile oil.

Millie Travers writes that she was very much interested at the Health Exhibition in seeing the way nutmegs grow, having always thought of them simply as the dry, hard nuts they appear in our spice boxes; she had never imagined them growing in any other form till she saw the whole fruit preserved.

They were exhibited in several places in the "Healtheries," amongst others in the druggist's shop in Old London. The whole fruit is in size and shape remarkably like a peach, but of a brighter yellow colour, and smooth-skinned like a nectarine. When the fruit is cut open, you see inside it a nut like the stone of a peach, but rather larger and rounder. This stone is almost covered by a bright scarlet network, between the fibres of which you can see the blackish brown kernel inside.

This scarlet coating is what we know as mace. It is peeled off the nut, and dried in the sun, which process makes the mace brittle,

and changes the beautiful scarlet colour into the dull orange brown, as we know it. When dry it is packed in balls and exported.

The nut itself, though brown outside, is white within, but has dark veins running through it, which give it a mottled appearance. At the meeting we cut one in two, and could see quite plainly how these veins seem to be the inner coating, dipping down into the white oily substance of the nut itself; something in the same way as the chestnut, only in that case the skin divides the nut into separate parts, which is not the case with the nutmeg.

In another part of the Exhibition the nutmeg tree itself was to be seen. It was very much like an orange or lemon tree, with glossy dark green leaves, and bore a small, yellow, insignificant looking flower. The tree is said to be very beautiful in countries where it flourishes (the East and West Indies); it grows about thirty feet high, and not only is the foliage very beautiful, but the leaves fall so gradually that they are not missed, and, like the orange tree, it is constantly covered by flowers and fruit of all ages together.

The next subject was ginger. Millie says that on one stall at the Exhibition there was a ginger plant growing. It has a creeping underground stem, from which shoots appear above ground at intervals, growing to about three feet high, and bearing pale green leaves shaped like the lily of the valley. It is this underground root-stalk which we know as ginger. When the stalks and leaves wither, it is ready for digging up. The outer coating

is carefully scraped off; the root is washed and dried. There were exhibits of ginger in various forms. First, that which had been whitened by bleaching, which is generally used for medicinal purposes; then the kind chiefly used for preserving, commonly known as green ginger—that is, the root simply scraped and dried without bleaching. Then there were bottles of powdered ginger, which is generally prepared from the broken, shrivelled pieces of root, and is frequently adulterated with arrow-root and other things.

Ginger is obtained from many parts of the world; in the drysalter's shop mentioned before, there were specimens from Africa, Jamaica, East Indies, and Japan.

Millie did not obtain much information from the Exhibition on the next subject—cloves; but she had made a list of the places from which specimens were exhibited, and added that she meant to study geography on her return home, as so many places were represented in the Exhibition of which she knows nothing at all. Those which sent cloves were Penang, Bencoolen, Amboyna, and Zanzibar.

There Millie's information came to an end; but Mr. Jowitt, our botanical member, became quite eloquent on the subject. He says we get them from a tree of the myrtle family; the leaves he brought to the meeting to show us looked just like laurel. The tree bears a great quantity of clusters of flowers of a bluish colour, with small rounded petals. Cloves are

the buds of these flowers gathered before they open, and dried in the smoke of wood fires, which gives them their deep brown colour. The drying is completed by laying the buds in the hot sun. Mr. Jowitt pointed out to us how in the cloves, as we get them, the four leaves of the calyx are generally perfect and unbroken. It is difficult to see the petals of the flower, as the cloves are generally so very dry that, on being cut open, they crumble to pieces; but we opened several at the meeting, and in all of them could see the pistils and stamens distinctly, even without a magnifying glass; and they are still more interesting under the microscope. We found that by soaking a clove in warm water for some time, we could open the petals into their natural position, and so could see the exact form of the flower as it would have appeared if allowed to open.

It is a strange fact that if the flowers are left on the tree to open they have no odour at all, and are not in the least aromatic.

Mr. Danby added that the name was interesting as showing how many nations had traced the same resemblance in them, our word, with the French "clou" and many others, being derived from the Latin "clavis," a nail, while the German "Nägelein" gives the same idea—a little nail.

The last subject—cinnamon—fell to my lot. I found that it is the bark of a species of laurel, which is grown to some extent in Malabar, and other parts of the East Indies,

but chiefly in Ceylon. It bears clusters of insignificant greenish-white flowers, followed by a fruit, very much like an acorn, in a six-toothed cup. The trees are examined twice a year, and the branches of three years' growth are cut down, and the thin outer bark having been peeled off, the twigs are cut open lengthwise, and the inner bark gradually loosened with the point of a knife till it can be entirely peeled off. This is partly dried in the shade, then cut into lengths, which are laid one inside the other and dried in the sun. The process of drying curls up the bark till it appears in the tight, compact rolls in which we buy it. It is then examined and tied up in bundles according to quality; the bundles we saw exhibited at the Health Exhibition were about a yard long. The best quality is very thin, and of a yellowish brown colour; the inferior is thicker and less fragrant. The small broken pieces of bark are powdered and distilled to obtain oil of cinnamon, which is extensively used in perfumery.

Mr. Danby told us that a friend of his who had gone out to Ceylon was employed for some time in examining cinnamon to judge of its quality. He had to taste each roll, but found it such very disagreeable work, he could not keep at it for longer than two or three days at a time, and he found that no one attempted to go on with it longer than that.

(To be continued.)

HIS GOOD SISTER.

CHAPTER II.



RUTH's first letters home contained glowing accounts of the luxury by which she was surrounded, of Cissy's beauty and amiability, and of Lady Braybrooke's liberality. There were only two things

which prevented her from being perfectly happy—her anxiety about her brother and her fear lest she should fail in her endeavours to help Cissy in her studies. For she found it a much more difficult matter than she had anticipated to interest that young lady in anything but the pursuit of pleasure. She would go to concerts, to come home and speak of nothing but how people were dressed, unless the music were of the lightest kind. She had a charming voice, and sang very prettily, but was satisfied that she had done quite enough with that accomplishment. She had great artistic taste, but lacked the steady industry which was needed to develop her talent. The study of languages was not at all to her taste, and often when Ruth was labouring to help her, Cissy would jump up with coaxings and caresses to induce her to stop.

"I can't think why you want me to be so dreadfully clever!" she would say. "It's all very well if you like it, or if you have to earn your own living; but as I shall be rich it doesn't in the least matter."

"But don't you think, Cissy, that you ought to take advantage of your good fortune,

simply out of gratitude to Lady Braybrooke?" said Ruth on one of these occasions. "Look what your education costs her! There are the art-school fees and two masters to pay, besides the very liberal salary that I receive. I only wish I were in your place!"

"Do you?" said Cissy. "When I grumble you tell me I ought to be contented. Practise what you preach, Mrs. Wisdom, and be contented yourself."

"How can I, Cissy dear? I feel as if I were here under false pretences. Lady Braybrooke expects me to help you, and if you will not let me I really think I ought to ask her to let me go," replied Ruth earnestly.

"Now, don't be a disagreeable, sermonising, cross old Ruth. I tell you I shall be rich and I don't want to be clever," returned Cissy, with a pout and a caress.

"Oh, Cissy, how can you tell that you will always be rich? A hundred things might happen to prevent—"

"That is all nonsense!" returned Cissy, pettishly. "Everybody knows grandmamma is going to leave me a lot of money—she has always led me to expect it, and she is very just, and it would be wicked of her if she did not."

"Oh, Cissy, if I were you I shouldn't like to think like that. Lady Braybrooke can do as she likes with her money, you know, and if I were in your place and felt so, I should be afraid that every little act of love or duty would be set down to interested motives."

"Oh, I am not afraid—that is, if no one tells tales or makes mischief for me. Mrs. Fortescue says that you —"

"I would much rather not hear anything she says, Cissy. You know I do not like her. I think her a frivolous, mischievous woman. Let us go back to our German."

"I am not inclined for study just now," replied Cissy, trying to assume a very dignified air; "and you say that because you want to keep in with grandmamma. You know that she doesn't like Mrs. Fortescue. I am going for a drive with her. Good-bye."

"Oh, Cissy, don't go!" exclaimed Ruth, very earnestly. "Lady Braybrooke wished you not to be so intimate with her. She told you so only yesterday."

"I am old enough to choose my own friends, and I am not going to drop her because she is not so rich as we are; you ought to be the last person to advise me to do so," said Cissy, her golden head held very erect.

Ruth coloured, and was silent; she knew to what Cissy alluded. That young lady had extracted from her by a series of questions the fact that she should not have thought of leaving home had not her father's means been suddenly and unexpectedly reduced. Cissy had been very curious to know more, but her curiosity had not been satisfied.

She had told Ruth that her reserve made her think that there must be something discreditable to conceal, but that it was not her fault; a view of the subject sufficiently near the truth to make any allusion to it extremely distasteful to her companion.

"There now! I have vexed my good, kind Ruthie," cried Cissy, penitently. "Don't be cross, dear. Kiss me before I go. I promised Mrs. Fortescue; I cannot disappoint her," and the foolish, wilful young creature danced off.

Ruth had done all she could to persuade her to give up the intimacy with Mrs. Fortescue; first, because Lady Braybrooke disliked it, and also because she disliked the lady herself. She was a worldly little woman, very clever and fascinating, who cultivated Cissy simply because of her relationship to the wealthy Lady Braybrooke. She had met her in the old days, before her grandmother had adopted her, and had not been so anxious to take her about then. It was only since her good fortune that she had developed such an overwhelming affection for her, as Lady Braybrooke very cynically remarked. But Cissy would hear nothing against her. She liked the flattery, and the opportunities of being flattered with which Mrs. Fortescue provided

if she liked." It was rather late in the day, and Rachel thought the next morning would be the better time, and so it was settled. Mr. Shenkin slipped a couple of pounds into her hand, saying, that he thought she might want her wages just then, and that Mrs. Shenkin had determined to give her that sum, because she had been so good to Tommy. Many may imagine that neither Mr. nor Mrs. Shenkin were very generous in their reward, but the first year's wages of a farm-servant, at the time of which we speak, were very low, and frequently the bare board and lodging were considered equivalents for the first year of initiation into household drudgery.

Rachel was well satisfied, as she had imagined that no wages would have been given her at all, no positive agreement having been entered into. Sally, who had kept aloof from Rachel during Tommy's illness, for fear she should lose her beauty, now ventured to approach her.

"Go you at once," she said. "Mistress will be sorry for giving you leave by to-morrow, when she has had a night upon it, take my word for it; but bless my heart, how ill you look, girl! Go you to bed directly, and I'll put up your things the while, that you may be off early to-morrow morning. Sure enough a night's rest will do you good, before you go to kill yourself outright by nursing your father."

Rachel took Sally's advice, and a long quiet night did much towards reviving her exhausted strength.

(To be continued)

OUR FRATERNAL SOCIETY.

By DORA HOPE.

THE TOILET TABLE.

I CHOSE looking-glasses as the subject for my contribution towards the study of the toilet-table because it seemed to me to be the most important article thereon, from most points of view; also because I am fond of history, and have always been interested to see how much looking-glasses have been mentioned from the very earliest times.

I suppose it was seeing their own reflection in water that first suggested the idea to our forefathers—(Tom rudely suggests that it was more likely to have been our foremothers)—but, at any rate, somebody had discovered at a very early date that they could see themselves reflected very well in a pool of water, and still better in a piece of polished metal. The Romans used mirrors of polished steel, brass, or silver; but long before their time we read that the Israelitish women gave Moses their brass looking-glasses to make the laver of the Tabernacle. I wonder how many women would be willing to give up all their looking-glasses nowadays! It is supposed by many people that some of the wonders performed by the Egyptian priests were managed with the aid of mirrors. It is certain that before the effects of reflection were so well understood as at present, they were much used by magicians and diviners.

Margaret reminded us that in the book of Job, which is probably still older than the time of Moses, the sky is said to be spread out like a molten looking-glass.

Tom, whose ideas of chronology are rather hazy, had also several quotations from his favourite book, "Sintram," in all of which

the warriors are described as using their shields for mirrors. He is very fond of telling us that girls are so vain (I do not believe that they are any worse than boys), and, as an illustration of his theory, told us he had read of an old Swedish custom that on the death of an unmarried woman a small looking-glass was always placed in her coffin that she might arrange her toilet becomingly on the resurrection day.

Mr. Jowitt told us that a few years ago, when the Japanese to a great extent gave up their old idol worship, amongst other things which they cast out of their temples were immense numbers of small and elaborately ornamented bronze mirrors. At that time they had so little idea of the value of metal, that three tons of these curious looking-glasses were sent as ballast in a ship to Liverpool, where they were sold as old metal at a few pence per pound. Happily a few were rescued from destruction by some gentleman who chanced to see the ship unladen, and are now preserved as valuable relics of old Japan.

In England metal mirrors were still in common use in the fifteenth century. They were almost always round, and set in a frame with a handle, after the fashion of our modern back-glasses. For a hundred years after glass was used instead of metal, mirrors were still made very small, and either kept in boxes or hung from the girdle. The best were always made in Venice, and were so valuable that when the French minister Colbert died, in 1683, amongst the treasures he bequeathed to his friends was a Venetian looking-glass, which was valued at over 8,000 livres, nearly three times as much as a painting of Raphael's which was another of his legacies.

Modern quicksilver backs are made, not of silver at all, but of a thin sheet of tin foil, "quicken" by being rubbed briskly over with a small quantity of mercury. More mercury is then poured into a sort of stone tray till of sufficient depth to float the tin, which is pressed down into it by a heavy weight till nearly all the mercury is squeezed out and drained off; the tin is turned with the silvered side uppermost, and very slowly dried and hardened.

The use of quicksilver, however, has to a great extent given place to a more modern process by which the glass itself is coated with a solution of nitrate of silver. This has to be repeated several times, and when finally dried it is protected from injury by a covering of varnish, and afterwards of paint.

Margaret, my very practical sister, added the information for the benefit of us young ones, that the best way to clean mirrors and prevent them getting smeary, is to wash them with soap and water, and then polish them with a chamois leather and prepared chalk.

Mr. Jowitt gave us an interesting account of the manufacture of perfumes. He says they are not nearly as much used now as formerly, and not as much in England as in eastern countries, where the heat and the dirtiness of the towns make perfumes almost a necessity of life.

Enormous quantities of flowers are grown on purpose for scent. During the season, tons of them are sold daily at Cannes and Nice. It is found that those of warm climates have the strongest, but those of colder countries the sweetest, odours. London and Paris between them supply the whole world with perfumes; England excels in some, especially violet and lavender water, which are incomparably superior to any foreign manufacture, while others are made better in France. Eau-de-Cologne is one of the most difficult perfumes to make well, the different scents of which it is composed having to be so carefully combined that no one of them is prominent. It is a very volatile scent, too; the odour passes off sooner than that of almost any other.

Odours are extracted in several different ways. That of orange, lemon, and citron is obtained by expressing the oil. The peel is put into cloth bags and subjected to great pressure till a watery oil is squeezed out, which has to be carefully purified before using. For some kinds of flowers distillation is the most satisfactory process. The rose-leaves, or other flowers, are set over a slow fire in a vessel filled with water, or sometimes spirit. The steam, which carries with it the finest of the odour, is drawn off through a pipe into another vessel where it condenses into a colourless liquid. In yet another process fat is used; generally lard, or beef suet. The fat is melted into pans, and the flowers mixed with it and left for a day. It is then melted again, the flowers strained out, and fresh ones added; this is repeated from ten to fifteen times, until the fat is saturated with the scent. Fat retains odours in a most remarkable way. Perhaps this may be the reason why cream brings out the delicate aroma of tea. There is still one other way in which odours are collected; a cloth, soaked with olive oil, is stretched in an iron frame and a thin layer of flowers spread over it; these are renewed again and again till the oil is saturated with the sweet odour, and is then squeezed out of the cloth.

The far-famed attar, or otto, of rose is made on the immense rose farms of Turkey. The process is very simple, but slow. A cask is filled with water and rose leaves, set in the heat of the sun during the day, and closely covered at night. In a few days some small globules of yellow oil rise to the surface, and gradually collect into a scum, which is carefully collected on cotton wrapped round the end of a stick, and squeezed out again into the small phials in which we buy it. One cannot wonder that it is costly when we think of the great quantity of rose leaves, and the endless patience necessary to produce a few drops of the oil.

Mr. Jowitt says that with perfumes as with most other things, it is not economy to buy cheap and inferior qualities; these have been prepared with cheaper materials and less troublesome methods, but the result is a weaker and less durable perfume, so that it is necessary to use double the quantity, while the quality of the odour is generally very inferior.

Margaret gave us a list of some of the other requirements of a toilet table; amongst others, combs, which she says have been in common use very much longer than brushes. In fact, she says that amongst the poor at the present time, brushes are very little used; in a poor man's family there is sure to be at least one comb, but it is quite the exception to find a brush; and, strange to say, the hair seems to flourish under this treatment, for, as a rule, poor girls have much longer and thicker hair than young ladies.

On the vexed question of hard or soft brushes, Margaret says the general opinion of authorities seems to be that both should be used, a stiff one, wire if preferred, for brushing the skin of the head, which needs to be stimulated by friction; but for the hair itself the softer the brush the better; all that is necessary is to have one just sufficiently stiff to free the hair from dust. The summing up of Erasmus Wilson's advice on the subject is that "you cannot brush the head too much, nor the hair too little."

Another matter on which people disagree a good deal is the use of pomatum. There are good oils on the scalp, but in many cases the supply is not sufficient to nourish the hair. The custom of oiling the hair is common amongst nearly all civilised nations as well as savage tribes, and perhaps its abundant use amongst the poor may be one reason for their thick hair. The question of the best kind of oil is very much a matter of taste, as the

varieties are chiefly in the scenting and minor details of preparation. That is, always supposing that it is a simple pomatum, and either home-made or prepared by a good hairdresser, for hair dyes and "regenerators" are almost invariably dangerous to use, not only injuring the skin, but often causing serious mischief to the brain. Margaret says she has heard of several doctors who have absolutely refused to prescribe for patients suffering from headache or brain affections till they promised to give up the use of hair restorers of all descriptions.

Mr. Danby, who never can resist a derivation, added that the origin of our word "pomade," or "pomatum," was that it used to be made by putting an over ripe apple into grease of some kind, and leaving it there till its supposed virtues were extracted.

Hair-dressing seems to have reached its greatest height in the reign of Queen Anne, when hairdressers were kept so busily employed that the ladies were sometimes obliged to have their hair powdered and piled up even two days before a "rout," and had to sit up all night in a chair with their heads propped up for fear of disarranging their coiffure; which reminds one of some of the South Sea Islanders, who make their hair into an imposing erection with the aid of palm oil and clay.

The use of false hair has been common in all ages. Amongst the Greeks and Romans both men and women wore it, changing from dark to light-coloured as the fashion varied, while those who had abundant hair of their own, dyed it to the prevailing colour. It is said that nearly a hundred tons of hair are now received annually in Paris, which is the great market of the world for this commodity. Climate seems to have a great effect on hair, the inhabitants of hot countries having as a rule dark hair, those of colder climates, lighter coloured; and it is always found to grow more quickly in the summer than in winter, and in the day than in the night. On a rough average, hair grows about half an inch in a month. The colour, again, has some connection with the texture; black hair is as a rule the coarsest of any, and flaxen the finest, while brown varies greatly. The average number of hairs on a tolerably well-covered head is computed at about 120,000.

There is still another class of articles which some ladies consider necessary to the toilet-table—cosmetics. Margaret did not enlarge much on the use of paint, as we had so often laughed at the absurdity of ladies who rouge their cheeks and paint their eyes, and actually imagine that people will think it is natural, that she thought it unnecessary to warn us against such a remarkable delusion. She says that in most savage tribes it is the men who paint themselves more than the women, sometimes with the idea of enhancing their beauty, but frequently also with a view to terrifying their enemies.

It used to be said that the dew that fell on May-day

morning had a wonderful effect on the complexion, but those who wished to apply it must gather it themselves, and therefore be up betimes. Probably the virtue lay less in the dew than in the truth taught by the old adage, "Early to bed and early to rise makes a man healthy, wealthy, and wise," and, if we add one more axiom, "Take plenty of outdoor exercise," no cosmetics are likely to be needed.

In the time of Mary Queen of Scots, baths of wine were recommended for old people, and of milk for young ones who wished to preserve their complexion; but doctors of the present day have a different opinion, and consider stimulants as bad for the complexions of young or old. It is useful to have a little glycerine, or something of that nature, on the toilet-table, for use when the skin gets chapped by cold winds; but girls in good health ought never to require anything else.

Our meeting closed with a suggestion from Margaret, the result of her own experience, that girls who are not so fortunate as to possess a proper dressing-case, would find it a great convenience to have a box made for their toilet-table with compartments for all the different kinds of pins—black and white, safety, black-headed, and hair pins. It adds

very much to the tidiness of the toilet-table, and is a great comfort and convenience to the owner.

(To be continued.)

TAUGHT HIS WAY.

THE STORY OF A LIFE'S PURPOSE.

CHAPTER II.

"WAY, here's a letter, father, from poor Nellie Heywood," said Florence one morning, as the postman's packet was laid on the breakfast-table. "I wonder how she is getting on!" she added, breaking the seal of an envelope bordered with black. "Her last letter was such a sad one."

Nellie Heywood was an old schoolfellow, and the sudden loss of her mother some little time back had deeply awakened Florence's sympathy. Nellie had been travelling with her only brother for a month or two, so her friend had not known where to write.

"Have they come home?" inquired Mr. Hamilton, as Florence glanced over the letter.

"Oh, yes, father," she answered. "They



THE MUSICAL EVENING.

perpetual confinement I will own to have been terrifying in the first years of our friendship and irksome in the last: nor could I pretend to support it without help when my coadjutor was no more."

Boswell questions the sincerity of this declaration, and it is not for us to pronounce a verdict upon it. However tempting the good things of Streatham, Dr. Johnson would have done well to remember and act up to the wise counsel of Solomon—"Withdraw thy foot from thy neighbour's house, lest he be weary of thee, and so hate thee."

Johnson, from the point of view of Mrs. Boswell and Mrs. Thrale, forms an interesting study. But no one, girls, can be perfect, or, to put it as Dr. Johnson has himself done, "a fallible being will fail somewhere." For that reason we must not condemn his shortcomings with too much severity. It is for our improvement, however, to be made aware of them, for "if nothing but the bright side of characters were known, we should sit down in despondency, and think it utterly impossible to imitate them in anything."

OUR FRATERNAL SOCIETY.

By DORA HOPE.

WASHSTANDS, AND HOW THEY SHOULD BE FURNISHED.



MILLIE TRAVERS wrote me a long letter a few days ago on this subject, and asked me to put her remarks into proper order for our next meeting, as she had not time to do so herself; but I think information is so much more agreeable when it is not arranged in proper order, and our meetings are very informal, so I only read extracts from her letter just as she sent it, and the other members interspersed remarks about any part of the subject they happened to have been studying.

"I was so tired of considering my limited purse," Millie began, "that I determined to study the question of the best kind of washing apparatus, regardless of cost; and I found plenty of scope for inquiry at the Exhibition. I looked first at bedroom washstands, for people who have not the luxury of a dressing-room. Those I liked the best of all were fitted into a recess, the walls of which were covered with white tiles to a height of about a yard above the washstand, and on to these tiles were fixed in front two hanging racks for tooth and nail brushes; and on each side of the recess brackets for water-bottles. These tiles, of course, do away with the necessity for any of those embroidered or painted 'splashes,' on the manufacture of which I have wasted so much valuable time, and the thought of how one could splash about to one's heart's content without doing any harm made me feel inclined to squander my last penny in fitting up a recess in my bedroom with tiles. Then the crockery was so beautiful, of all imaginable colours and designs, to harmonise with the bedroom hangings and tiles. I can assure you those old-fashioned rounded water-jugs are things of the past; the new style are square-sided, oval, or any other shape you can think of, except round.

"But that is not the only novelty; each piece is finished off underneath with a ring of india-rubber, fitted into a groove in the china, so that it makes no noise when put down on the marble stand (an immense comfort, I should think, in a sick room), and does not scratch or injure the polish. I may as well mention, while on this subject, that the same invention

is applied to hot water or milk jugs for the breakfast table, and is found to be perfectly successful in preventing the table from being marked by the heat.

"But to return to the washstands. The style I have been describing is used chiefly for old houses. Where new ones are being built according to the inhabitant's own views, pipes with hot and cold water are laid on, as for a bath, and the washstand in this case is a fixture, fitted into a recess arranged specially for it, and has a basin, with a waste tap, made to tip up, or to empty in one of the other ways employed for lavatory basins. This struck me as a very great convenience where it could be managed, and such a saving of trouble to the servants; but I suppose it could only be applied to houses which are being built, or to those old ones which have already a good supply of hot water upstairs.

"The authorities on washstands at the Exhibition strongly recommend racks of some sort for toothbrushes, instead of the old fashioned china boxes with lids; and I quite agree with them, for I have found by experience that keeping my brush covered spoils it; it cannot dry properly without any air, so it soon becomes unpleasant to use, and the constant dampness makes the bristles come out. I have always been afraid of using a brush with loose bristles since a conversation I had with a sick nurse, who told me she had herself nursed three cases where a surgical operation had to be performed through a bristle from a toothbrush getting imbedded in the throat quite out of reach."

Dr. Wingate added that this was quite true; he had met with similar cases himself, and though such severe ones are not very common, slight injury to the gums is constantly occasioned by loose bristles getting fixed in them. He thinks people make a mistake in buying cheap brushes with the idea of being economical. A good deal of injury is caused too, he says, by using very hard toothbrushes; they wear the enamel off the teeth, and make the gums bleed.

"They seem to be a good deal exercised in their minds about towel-rails," Millie went on; "there are a great many varieties displayed; the only point on which they agree seems to be to avoid old-fashioned separate stands. Some washstands had rails attached to them at each end, which I liked, but most of them were too close to the stand to slip the towels over easily, and too small to hold more than one each, and I like a good supply; but, no doubt, the rails could be made larger. Others, for rooms where space was very limited, had two brass arms sticking straight out into the room in front of the washstand, but when not in actual use the rails could be pushed back (one end being fixed into a groove underneath the stand), so that the towels hung right under the table.

"The subject of towels is too large a one to enter upon, but I see that Sir Erasmus Wilson recommends the use of moderately soft ones, so that vigorous friction can be indulged in without hurting the skin. Speaking of Sir Erasmus Wilson reminds me that he says the furniture of every washstand should include one of those little ivory presses to push back the skin overlapping the base of the nail. If allowed to grow too much it gets ragged and torn, making a painful little wound, besides spoiling the beauty of the hand by covering the half-moon-shaped white portion of the base of the nail. If nails get accidentally stained or discoloured, the best remedy is lemon juice. I have always disliked washing my face with soap, but he says emphatically that all parts of the body exposed to the air, which, of course, includes the face, should be washed with soap at least twice a day, and he winds up by saying: 'No harm can arise from too frequent ablu-

tions; much evil may result from their neglect.'

"I must leave the subject of soap to you; it is quite too overwhelming to begin upon in a letter. One exhibitor showed a life-size bust of the Prince of Wales in white soap, on a mottled soap pedestal, while others exhibited pyramids, Cleopatra's needles, animals, fruit, and almost everything else you can think of. On the whole, the manufacturers seem to agree that glycerine, honey, oatmeal, and coal-tar are among the best of the toilet soaps, and they one and all agree in warning people against buying very cheap kinds."

Our doctor here interposed that as he happened to know how soap was made he might as well tell us. (He always does "happen to know" how everything is done.) He says the use of soap, such as we have, was not known in very ancient days. Margaret reminded him that it is mentioned in the Bible as being in common use, but he says that was only a "ley" made by pouring water through the ashes of burnt wood or plants. It was not till a much later date that the combination of this ley with oils was discovered, and it is this which is the main principle of our modern soap-making.

The materials chiefly used now are tallow, cocoanut, linseed, whale or seal oils, a few other varieties being employed to a small extent. These are heated by steam in a large iron pan, with a ley made of the ashes of burnt wood and lime, or sometimes of a mixture of carbonate of soda and lime. The heat is gradually increased till the mixture bubbles, and then a quantity of common salt is added to the pan, and this last addition causes the soap (which solidifies in salt water) to rise to the surface in a mass, and the water is drawn away from the bottom of the pan. This process has to be repeated, and the soap is then cooled, which solidifies it, and cut up into bars or tablets for sale. There are many different varieties of soap, but this general principle of making applies to them all. Some have colouring matter added to them, others are scented by the addition of essential oils. It is generally well to avoid brightly-coloured soaps, as the colouring is sometimes added to hide the impure ingredients of which it is made, and which would be very injurious to the skin.

Millie's letter went on:—"I took a friendly interest in the vaseline exhibits, too, for Margaret's sake. I believe she thinks it will do anything that is required, from preventing rust on fire-irons, to making the hair grow again on bald heads. She looks upon it like the magic fountain in fairy tales, which instantly healed all the wounds of anyone who bathed in it. I ought not to scoff at it, though, for an application of it really did my gathered finger great good. And now please tell her I have discovered that it is made from petroleum somehow, though I do not quite know how, and she can have it made up in all manner of ways, even to 'vaseline confections.' Some people do not like vaseline, however, and prefer to keep to glycerine, either pure, or mixed with honey and other things. I have put a little on my hands before washing ever since the cold weather began, and it keeps them perfectly smooth and comfortable, though you know how rough my hands usually get in cold winds. I think everyone should have it on their washstands. I do not know how it is made; perhaps someone else can tell you."

We applied as usual to the doctor for information, and he says that glycerine has only been known for about thirty years, except to chemists. It is obtained in large quantities in the process of soap-making. The soap collects, as explained before, in a sort of thick scum on the top of the water, and when this latter is drained off it is found to contain the

glycerine. It is obtained by distillation; that is to say, the water is heated and the steam carries the glycerine with it into another vessel, where it is allowed to condense again. Large quantities are obtained, also, during the manufacture of candles. Glycerine is very much used in medicine now, for surgical dressings, for mixing with and dissolving other medicinal substances, and for making toilet creams and soaps. It is, altogether, one of the most useful discoveries of modern days, as it can be used for an almost endless variety of purposes.

Vaseline, when pure, is a jelly obtained from petroleum by repeated filtering and purifying. The valuable healing properties of petroleum have been known for many years, but the oil as it is taken from the earth has a very unpleasant smell, and it was a long time before any process could be discovered by which it could be purified without destroying its medicinal properties, but this is now successfully accomplished by filtration through animal charcoal.

Mr. Danby gave an account of the growth of sponges. He says there has always been a dispute from the time of Aristotle to the present day as to whether they were animals or vegetables; they have so little vitality that even now one or two naturalists still cling to the idea that they belong to the vegetable kingdom. But with these few exceptions, it is now universally agreed that they belong to the lowest form of animal life. They are found in all sorts of shapes and sizes, some branched like trees, some funnel-shaped. One variety grows to a height of four or five feet, and is just like a huge wineglass with a narrow stem, expanding into a large bowl.

Mr. Danby brought specimens of the two kinds usually seen on washstands—a large, coarse "honeycomb" from the sponge beds of Florida or Bahama, and a smaller and much finer one, of the kind brought from Turkey or the West Indies. Turkey and Bahama supply the best of each kind.

He had brought the fine one home himself from a Turkish sponge bed. He told us that some years ago he went to the Mediterranean with his father, and had an opportunity of going out sponge fishing in one of the Turkish boats, of which there are about six hundred always employed. They went to a place where the water was about eight or ten fathoms deep, with detached masses of rock at the bottom, and sent down a diver. In a short time he signalled to be drawn up again, and they found that he had torn a very large sponge off the rock to which it was fixed. He then went down again, and the work was continued till a considerable quantity had been collected.

Many of the divers use a pronged instrument to get the sponge off the rock, but this generally tears and spoils the sponge. But he said that though the one he showed us was one of the very sponges he had seen brought up, we must not imagine that it looked at all like it did at present. It was entirely coated outside with a substance like a jelly-fish, which also extended through all the openings in the sponge. In fact, this jelly is the real living creature, and it has all to be carefully removed before we can use what we call the sponge, but which is really only the dead skeleton from which the living sponge, or rather colony of sponges, has been torn away.

He showed us in the fine Turkey sponge how it is made up of a fibrous mass, with a comparatively small number of large holes, but completely riddled by fine, small pores. Each of these pores is inhabited, in the living sponge, by a tiny, jelly-like creature, the whole object of whose existence seems to be to suck in water, extract all the nourishment from it, and shoot it out again through the large hole with which all the small ones grouped round it, communicate so that there is a constant circulation of water going on through the whole sponge. The life of these little creatures is not very clearly understood even now, but it is supposed by naturalists that this circulation of water may serve the two purposes of feeding and breathing at the same time. The coarse honeycomb sponges have many more large holes for expelling the water than the Turkey variety, and are consequently not nearly so durable. They are sold for about ten shillings per pound, while the fine ones are worth from thirty to forty shillings.

Many small sponges grow round the English coast, but none which can be used for toilet purposes. An experiment is being tried at the present time, but so far unsuccessfully, to make a sponge bed in the Gulf of Marseilles by breaking off masses of rock without disturbing the living sponges adhering to them, and towing them slowly through the water to their destination. So far, the sponges have not flourished in their new home, and if it is not more successful within the next few months the attempt will have to be given up.

(To be continued.)

SEVEN YEARS FOR RACHEL;

OR, WELSH PICTURES SKETCHED FROM LIFE.

By ANNE BEALE.

CHAPTER XXII.

THE BIDDING LETTER.



HE time at last drew near when William was to prove, to Sally's satisfaction, that he meant to marry Rachel, by "putting the ring on her finger, and saying yes." Sally had made Rachel her confidante, and had told her that if she could keep Bill in the humour she intended to marry on the same day that she did, and thus make a double wedding. Mrs. Shenkin had promised Rachel a treat for herself and friends, and Sally hoped that her mistress would do as much for her.

"You know my stafell is ready, Rachel," she said, "and we shall have a bidding. You are too smart and proud for a bidding, but we poor folks shall be very glad of what our friends will give us to set us up in life. Besides, you have got your furniture all prepared."

Rachel prudently suggested that she thought they had better defer their marriage until their prospects were more

brilliant, since Bill was poor and Sally was poorer.

"Trust to me for that," cried Sally. "Take a man whilst he's in the mind is my notion, or else, perhaps, he won't take you at all. I know more of these matters than you do. But you must tell my mistress, and try to get her in the mind, too, for I'd give the world to be married the same day as you."

Rachel promised to do her best, and succeeded, after much reasoning and disputation, in prevailing upon Mrs. Shenkin to allow the two weddings to be on the same day, and both celebrated at the farm.

Sally was to have a bidding: and for the benefit of such of my readers as have never either seen or heard of a Welsh bidding, I must premise that it is a gathering or "bidding" together of as many of the friends and friends' friends, acquaintances and acquaintances' acquaintances of the bride and bridegroom, as a number of bidding letters can assemble. Each of these invited individuals is expected to contribute either a gift or a loan of money towards the establishment of the young couple. If a loan, that loan is to be repaid when the lender, or any friend or relation to whom he may transfer it, proposes to enter the holy state. Thus the wedded pair, set up in life upon the gifts and loans of their

friends, are liable to be called upon for repayment when they may be totally unprovided with money.

Sally showed her usual cunning and good policy in making Rachel's wedding-day hers, for she knew that the additional persons collected together would add greatly to her wealth. Her bidding-letter, too, was most attractive—another effort of her genius. She had heard that somewhere over amongst the mountains there lived a famous scholar. He was a schoolmaster and a poet, and had acquired a great reputation for the composition of bidding-letters, which, however incomprehensible, were much admired for their elegance and eloquence, and produced an electrical effect on the minds of their readers.

To this mountain spirit Sally dispatched Bill one cold morning in the beginning of November. It was a long ten or twelve miles' walk there, but the success of his mission amply repaid him for his trouble. It is true, that he found much difficulty in persuading himself to approach the awful poet, for one singular effect of his poetic fire was that it made everyone afraid of him. When Bill had summoned up sufficient resolution, he knocked at the door of a small cottage, that was pointed out to him as the residence of the dreadful man, and was greeted by a stern "Come in;" at

worn, and all the new shoulder capes, that are very large, come rather below the waist, and are tied in at the back.

All the new cloth jackets are exceedingly plain, and so are ulsters; the latter being double-breasted. *Frisé* woollen materials, both in black and colour, are used for long mantles; and there are some new *vigognes* also, with patterns of indistinct outlines on them in a different colour from the foundation—such as red with grey designs, blue with copper-coloured, dark green and brown, etc. This *vigogne* is not a heavy material, and the cloaks are lined with silk, shot with the two colours in a brighter shade, and the trimming used is yak lace.

I have spoken of the wide neckbands, and have endeavoured to illustrate patterns of the newest bodices in the two figures in indoor costume. The beaded edge which surrounds the first bodice consists of beads strung on a thick cord. This bodice represents the method of putting on a full plastron, with a jet ornament at the waist. The bodice given last month is suitable for both these styles of trimming. The waistcoat and band for the neck in the second figure are of velvet, the trimmings being black or coloured beadings.

The small collar illustrated can be manufactured by any of my readers. It is of velvet, with fancy beadings mounted on it of jet or metal. The lining should be of a stiff buckram, which all the new collars require to keep them in place. It fastens with two hooks and loops; the lace lappet is gathered to form the shape.

The "catagan" is the last new thing in hairdressing, and is not difficult to arrange after a little practice. The hair is first tied together at the nape of the neck, and then the rest of the ends are rolled smoothly up underneath, and tied with the ribbon which is

run through the roll. The hair is curled at the top of the head. This method of dressing the hair, if it becomes general, will make a change in the high bonnets worn at present, which do not answer well with it.

The new sleeves are longer than they were for day wear, but in the evening the half-long sleeve is as much worn as ever. The new cuffs have the trimming and point on the inner side of the arm, and not on the outside seam.

Skirts are very generally box-plaited, the new box-plaiting consisting of plaits about four or five inches wide with a very shallow turn-under plait at either side, and the edges of the plaits touch at the right side. The tunics being so very long, all skirts are much covered up. Tucks are used for flounces, and also for the finishing of the full skirts under the tunics. All the back drapery of skirts has changed its appearance from extreme puffiness and bunchiness to long straight lines, or looped-up folds, which form a bag-like drapery, one corner of which hangs down instead of being caught up to the waist.

Cotton dresses, by which I mean zephyrs, ginghams, sateens, etc., will be worn with the Swiss belt this season, made in velvet to match or contrast with the dress. A collar and cuffs of velvet may also be added, and small epaulettes at the top, or a very deep one like a second upper sleeve. The tunic has a long point in front, and two points behind. Some of the sleeves of zephyr dresses are cut on the cross.

The Swiss bodice has been selected for our paper pattern this month, as it forms such a stylish and useful addition to the dress of a young girl. The bodice laces behind, as shown in our illustration, and the bodice beneath is slightly full. Our pattern (which will be sent by post for one shilling postal order sent to the

Lady Dressmaker, care of Mr. H. G. Davies, 73, Ludgate-hill, London) is cut, like all those sent out, without turnings; and, consequently, can be enlarged or taken in by adding them or not, as required. It is in seven pieces, front and back of bodice; belt, half of Swiss belt, collar, cuff, and sleeve. The bodice will require about two yards and a half of material, twenty-four inches wide. The Swiss belt and the collar and cuffs—if these are also made of velvet or velveteen—will require a yard of material of the same width. The Swiss belt should have a buckram lining to keep it stiff, and the front and backs will require whalebone. The eyelet holes for lacing should be made with silk twist, and the lacing can be at the back or front of the dress.

If the slightly full sleeve of this pattern be not liked, the sleeve of last month's bodice can be used instead. The full sleeve is pretty for a young girl's use. The notches in the paper patterns should be carefully observed. The under seam of the sleeve should be placed at the notch in the bodice armhole. There is no seam in the back of the bodice; the material should be folded lengthwise before it is cut. It is, perhaps, needless to say that the fronts of the bodice are cut lengthwise also, and the fronts of the Swiss belt placed to the selvedge.

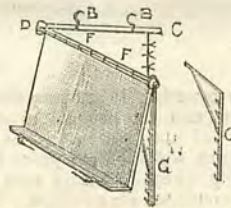
The hems of a bodice in front are allowed about two inches wide. They should be turned down before the bodice is cut out, and the pattern laid on them. Allow one inch on the shoulders, one inch and a half under the arms, and three-quarters of an inch on the back and side; form seams for turnings. The bodice of the pattern given may be lined, and the material and lining made together; or it may be made up unlined, in cotton materials, and a plain thick bodice of white cotton worn underneath for additional warmth.

OUR FRATERNAL SOCIETY.

By DORA HOPE.

SUBJECT OF DISCUSSION.—THE WRITING TABLE.

OUR subject—writing tables—produced a good deal of discussion at our meeting last night, as there was some difference of opinion as to the best form of table, and still more as to what a properly fitted one should contain. At last we came to the amicable conclusion that it is impossible to furnish a table so as to



B.—Hooks to fit on rings. C.—Brass (?) rod. D.—Strong hinge. E.—Ledge for books and clips to keep them open. F.F.—Hinge on bar. Rack for raising and lowering book-rest.

one at the right hand side contains a substantial inkpot on a little sliding shelf, which can be pulled out when in use; the others hold a gum bottle, pincushion, memorandum tablet, and a few other articles.

A brass staple is fixed in the middle of the bookcase on either side of this central space, to which when required a book-rest can be hooked to place books on from which extracts are being made. It is simply a leather-covered ledge on which to rest the book, fixed to a brass arm with a rack, so that it can be raised and lowered at pleasure, and entirely removed when not in use.

At one side of the bookcase, round the corner, another jointed arm is fixed bearing a lamp, so that, in the daytime, or when not in use, it can be turned right away like the book-rest; the lamp can be raised and lowered at will, and is very carefully shaded, so as to cast a light upon the paper or book, and not into the owner's eyes. Mr. Danby says great care is needed to keep the lamp well cleaned and trimmed—in fact, Mrs. Danby attends to it herself, as otherwise there is a disagreeable smell of oil and a bad light.

If a writing table is for the convenience of several persons, Mr. Danby strongly recommends a chair which can be raised or lowered, like a music stool, as so much of the comfort of a proper writing table depends upon having a seat of a convenient height. As no one but himself uses his own table, he does not require this arrangement, but has a chair of the height he requires, on a swivel, so that he can turn it in any direction. The great comfort of this contrivance will be fully appre-



suit all tastes. Everybody has their own idiosyncrasies, and must act accordingly. Mr. Danby gave us a description of one his father always uses, and we were of one mind that, for a literary man, or a doctor, or anyone with a great deal of business correspondence, it was a model of convenience.

The lower part is like an ordinary large Davenport, with a bookcase standing on it, against the wall. In the middle of this case is a door, which, instead of having hinges at the side, has them at the bottom, so that it falls forward on to the table, forming a convenient sloping desk, and revealing inside a set of small drawers of various sizes, one fitted with compartments for different stamps; the others containing string, indiarubber, pen-knife, scissors, new pens, paper-clips, and all the other small but indispensable adjuncts to a writing table. These drawers do not fill up the whole space covered by the door, a small portion being left for pigeon-holes; a large

ciated, without any description, by those accustomed to write surrounded by papers and books of reference, and who know with what a strange perversity the particular paper one wants is always just where it cannot possibly be reached without getting up from one's chair.

At the right-hand side of Mr. Danby's table, on the floor, is a waste paper basket, and on the left one of those delightfully convenient, four-sided bookcases, resting upon a central pedestal fitted with a swivel, so that it revolves at a touch, and enables the reader to take out books from any side of it without altering his position.

Our doctor gave us a few remarks on the value of a sloping desk for writing; he says children should never be allowed to write with their paper on a flat table. It is most important that they should sit upright when writing, and in order to make this possible the desk at which they write should be carefully adjusted, both as to slope and height, so as to suit each child. He gave us an alarming list of diseases, beginning with curvature of the spine, and ending with brain disease and death, either wholly caused, or greatly aggravated, by neglect of these precautions. He says the poor children in board schools are much better treated in this respect than those in private schools, for their health is seriously taken into consideration, while richer children are expected to write for hours every day with chairs and tables so arranged that they must in any case become round-shouldered and stooping, even if more serious consequences do not appear. The desk should have a slope of about fifteen degrees; more than that is uncomfortable. The chair has almost as much to do with stooping as the desk, and should be as carefully regulated.

Father brought in an old writing desk of his to show the society. The edges are bound with brass, and it has elaborately ornamented keyholes and handles. There is always a peculiar fragrance about these ancient desks, partly, I suppose, from our forefathers' fondness for Tonquin beans in them; and partly, perhaps, a "fragrance of old associations" in the shape of faded love letters written on the large letter paper of olden days and worded in a style of such ceremonious and respectful courtesousness that they make one feel ashamed of the hasty and ill-expressed notes we write nowadays. But the great charm of these old desks are the secret drawers, without which none was ever considered complete. Patent locks have done away with the necessity of these hiding-places, and though we lose the charm of mystery, we modern letter writers certainly gain in convenience. There is no need to describe father's desk, for everybody knows the style, with the inner side of the lid crossed by braids, fastened by brass nails, for holding folded papers; and the two brass sockets, into which fit little brass candlesticks, and a little bottle like a pepper-box for sand to shake over the writing in the "good old days" before blotting paper was invented.

Having properly admired the old desk, we turned to the first of the "contents" of the writing table, and naturally took paper as the most important.

There was no need for Mr. Danby to tell us that the name came from "papyrus;" but he went on to tell how paper is made, which I had quite forgotten, though I am sure I must often have heard.

It was made at first, he said, only of linen rags, but these soon became insufficient, and other rags had to be used; indeed, now England cannot supply rags enough of any sort, and great quantities are imported. During the cholera scare last summer, several shiploads coming from the Continent were stopped, as it was thought they might bring

the germs of cholera. But the manufacture of paper has increased so greatly that now even this large foreign supply of rags is only sufficient to make the very best paper; the cheaper kinds, including almost all printing paper, is made of Esparto grass, sawdust, chopped straw, and various other things.

The rags when collected have to be sorted and cut into small pieces after the seams and buttons have been taken off. They are then washed and bleached with chemicals, and torn to shreds by machines with sets of revolving teeth. This is done over and over again until the rags are reduced to pulp. Up to this point the rags have all been treated alike, but now the pulp is differently handled according to the kind of paper to be made. The chief difference is in the quantity of "size" to be mixed with the pulp. The effect this has is easily seen by comparing a sheet of blotting paper, which contains no size at all, with the common kinds of printing paper, such as that of which newspapers are made, which contains a very little size, or with a sheet of good writing paper, which has a great deal.

But the quantity of size does not make the only difference. Paper is said to be either "laid" or "wove." The pulp is strained into a mould the size of an uncut sheet of paper, which for "wove" paper has a bottom of wire gauze, like a sieve, while the best quality of writing paper is made in a sieve in which the wires are stretched in one direction only, about 15 or 20 in an inch, with bars of thin wood crossing them at intervals. Mr. Danby showed us the difference by holding up two sheets of paper to the light, one a sheet of good note paper, with the lines in it all going one way; the other printing paper, marked all over with the wire gauze (it was a sheet of the G. O. P. we looked at). He called our attention, too, to the water-mark on the writing paper. This, he says, is made by having the required device made of thin wire, and sewn on to the wires at the bottom of the mould, and as the water is gradually drained off, and the filaments of the paper gradually combine or "felt" themselves together, that which lies over the wire device becomes thinned and more transparent than the surrounding paper. Paper is made in large sheets and cut down to the required size; the very best writing papers have several watermarks on the mould, so that there will be one on each sheet of note paper when cut up; but all but the most expensive kinds have only one mark for the full sheet.

The paper is turned out from the mould on to sheets of felt, which are piled one upon another and subjected to heavy pressure, and the final process of glazing is completed by repeated pressings between hot rollers.

Blotting paper is all made of rags, but has no size, and is only slightly rolled on one side.

A curious story is told of the origin of the name "foolscap" paper. Cromwell's parliament were annoyed that all the paper they used should bear as a water-mark the royal arms, the result of its having been given as a monopoly to one of the king's followers, as a means of raising money; and as they were anxious to cast ignominy on all the monopolies the king had granted, they ordered that henceforward all the paper made for parliamentary journals should have, instead of the royal arms, a water-mark representing a fool's cap and bells. This was removed when the parliament was prorogued, but paper of that particular size still bears the name of "foolscap."

From the subject of paper we naturally passed on to ink and writing utensils.

Tom told us that registrars are instructed always to use black ink, and to allow the writing to dry without using blotting-paper, as it is of great importance that their entries should not fade.

What is called Indian ink is more durable than any we make. It really comes from China, and has a Chinese inscription in gold letters on each stick; the best kind is delicately scented. We do not know what kind of ink the old Egyptians used, but it was wonderfully durable, for in many of the mummy cases rolls have been found with the writing still quite legible after the lapse of thousands of years. *Probably, like Indian ink*, it was more of a paint than real ink, and in any case they would not use steel pens, which are said to have a bad effect upon ink, and make it less durable than when quills are used.

Common black ink is made of oak galls, gum arabic, copperas (or vitriol), and water. The galls are powdered, and mixed with chopped straw to prevent them forming a stiff paste. This is put into a vat, with a tap at the bottom for drawing off the liquid. The paste is washed with slightly warmed water to extract the tannin, and after this is drawn off, crystallised green vitriol is added, and then gum. It is exposed to the air till the liquid attains the desired black colour, and it is then drawn off and bottled; some makers hasten the process by the addition of logwood.

Coloured inks are made by different processes; red ink is got from a decoction of Brazil wood, thickened with gum and alum; violet is made by adding tin crystals and alum to a strong decoction of logwood.

Tom also told us that if we wished to write anything to last a very long time we could manage it by rubbing down a little Indian ink, and adding it to common black ink; it must not be too thick, just thin enough to flow from the pen.

Mr. Jowitt had been looking up our last subject, pens, and though he always professes not to feel any interest in Mr. Danby's pet subject, derivations, he could not help remarking how much one may learn of the changes in our social habits and the progress of civilisation from the names of common things. Nowadays not one person in a thousand ever uses a quill, yet not only does the word pen itself mean a feather, but in all but the most modern dictionaries, the description of a pen is given as "a feather prepared for writing."

It was only in 1820 that Joseph Gillott invented steel pens fit for common use. There were a few before that time, but they were clumsy and expensive, and it was some years later before they came into general use.

The manufacture of nibs is wonderfully delicate. So many processes have to be gone through before the sheets of metal, eight feet long, are cut into strips, stamped out, annealed and shaped, tempered and polished, ground and coloured, and finally sorted and packed, that each pen we use is really a model of workmanship.

Mr. Jowitt pointed out to us how each pen has an oblong hole in the middle of it, with a central slit running from it to the point. The making of this last slit is the most delicate operation of the whole, for the value of the pen depends on it, and as it is done nearly the last, if it is not exactly right all the labour bestowed on the pen up to that point is lost.

We had meant to talk about all the other contents of a writing table, but our time was gone, so we closed our meeting after having one or two brief remarks from Margaret about gum, which, she says, has almost superseded the sealing-wax and wafers of olden days. She says that she read in an American paper lately that gum arabic comes almost exclusively from the Soudan, and that, owing to the operations of the Mahdi, none has been received for more than a year past. It is a resinous substance, exuding from a kind of acacia, the same, it is believed, that Moses used in the wilderness for the ark.

(To be continued.)

did not feel quite sure of the love or of the principles of one's future husband—must be such a very alarming undertaking."

"So do I; but Charlie is quite a—what's that Latin sentence?—a *rara avis*; even good enough for me!" and she made a little curtsy, and lifted up her face to kiss Blanche again.

Then they sat and talked, or rather Alice talked, and Blanche listened, until the hour for the violin lesson had expired, and the latter rose to go.

"You must have two hours next time," she said, laughing, "to make up for the loss of this morning."

"Well, I could not help it for once, now, could I? I was obliged to give vent to my happiness, and tell you all about everything; but you know, Blanche, that I shall live close by after I am married, so the fiddle needn't be thrown over, even then; and I will tell you of a capital idea I have just thought of. You remember saying once that it would be a good thing to have a concert in the town, only that you did not feel equal then to playing a solo. Now you are equal, and not at all nervous, and Monsieur Dubois says you are a wonderful artiste, in which I quite agree; so what's to hinder it? And don't you see, I, as a married woman, can do so much to help it on. I shall be married the very beginning of April—not the first, of course, though—and so directly I come back from wherever we go, the concert might come off. Front seats, reserved, a guinea. Oh, what fun! Old Dubois would do the accompaniments, I'm sure, and we must find somebody to sing between whiles, and I shall sit right in the middle of the front row with Charlie, and we will both applaud."

"That you will, I know," said Blanche, "if the concert can be got up; but in a little county it's not so easy, though I confess I should like it."

"Well, I shall speak to old Dubois about it," said Alice, and she kept her word.

Two months after this conversation, there was a considerable stir in the town; bills were put up on the one good-sized room—called by courtesy the Town Hall—which it boasted, and were also to be seen in the shop windows, announcing that a concert would be held on Thursday evening at eight o'clock. Principal performers, Miss Elmslie, Madame Vignon, and Monsieur Thierry. At the piano, Monsieur Dubois. Reserved seats, half a guinea.

This event had been brought about chiefly through the good offices of Monsieur Dubois, who entered heart and soul into the idea when mentioned to him by Alice, and only differed from her as to when it should take place.

"No use to wait till the month of April," said he. "I will arrange it all, and soon, if you will permit me."

So it was arranged, and all the world—which was a very small one certainly—of the town of Slocombe was on the *qui vive* to hear Blanche Elmslie play a violin solo in public, and various were the opinions expressed beforehand as to her capabilities, and also as to the correctness of her doing such a thing at all.

"It was never heard of in my day," said old Miss Mangles, "for a lady born and bred to make a show of herself; but there, everything's gone topsy-turvy now according to my ideas. When I was young, girls used to play the *Battle of Prague* to their fathers and mothers in a quiet, decent sort of a way on the piano; but the very notion of a woman playing the fiddle! Well, well—"

Fortunately for Blanche, however, the Misses Mangles were but few, and her own friends many, thanks to the numerous pupils whom she had trained during the last six months, so that her audience bid fair to be both large and appreciative. Alice and the two Fletcher

girls were full of interest about what she should wear on the occasion, Monsieur Dubois was unremitting in his visits for rehearsal of the *Polonaise* by Chopin which she had decided to play, in order that there might be no weak spot in the performance, and Frank Neville, who was home on leave, and was much struck with the brave talented girl, sent her on the morning of the eventful day a box containing a curious group of figures in oxidised silver, which he had picked up in his travels, and offered now "as a token of his good wishes for her success."

Mrs. Elmslie was nervous and confident by turns, but never let Blanche see any sign of the former, and when, at half-past seven, mother and daughter got into the carriage which was to take them to the Town Hall, they both looked, to outward seeming, perfectly calm and free from anxiety. Blanche's hands were strangely cold, certainly, and her heart beat in a very unusual way, but she reminded herself that after all she could play extremely well; that in reality it was no more difficult to play in the hall before the townspeople than in a drawing-room with only a small audience, and, last but not least, she thought of the many comforts which her mother had already received, entirely the result of her—Blanche's—earnings, and of how much the money realised by this concert would help to increase those comforts. All these considerations tended to support and give ballast, as it were, to her mind, and, in fact, she did get such mastery over herself that when the actual moment arrived, and she stood on the platform, violin in hand, and saw a sea of faces all upturned towards her, the excitement she felt was more like that of a racehorse at the start, or a greyhound in the leash, than anything approaching the horrible nervousness which incapacitates people so often from doing their best. Monsieur Dubois was in his place at the piano, and gave her an encouraging nod and smile as he struck a preliminary chord or two, then in another second he made her a little sign, and began the *Polonaise*. The violin part does not come in till the end of the second bar, and in that moment of waiting Blanche saw in the front row a whole bevy of her special friends, among them Alice in the middle seat, with Charlie on one side of her, and Frank the other. She saw her mother also with her heart in her eyes as she fixed them on her child. This somehow added still more to the girl's self-possession, and it was with a hand as steady as a rock that she drew her bow across the strings.

It was a tremendous success, and the applause seemed as though it would never stop. Partly out of liking for the girl, who had made herself very popular, and partly from admiration for her really first-rate playing, the townspeople, as well as Blanche's own particular intimates, were almost rapturous in their satisfaction.

"Bravo, bravo!" cried some, and "Hooray" shouted a man from the shilling back benches, adding in a loud whisper to his neighbour, "That's what I call something like; none o' yer wishy washy things, so soft you can't 'ear 'em scarcely. I likes the violin played like that."

Blanche had to make repeated bows to this most gratifying audience, and to receive two huge bouquets handed to her by Frank Neville and the kind old Frenchman respectively, so that it was several minutes before she could retire to the green room, there to have a cup of coffee which was in readiness.

"Ah, my dear Mademoiselle," cried Monsieur Dubois, "did I not say how it would be one great victory? I knew, I knew, and I was right, is it not so?"

Then came pouring into the room her mother, the Nevilles, the Fletchers, and other of her friends, all eager to offer their congratu-

lations, and to carry her off to Morpeth House, where a sort of "triumphal supper," as Alice expressed it, awaited them, and where the proceeds of the concert, fifty pounds, was to be given to her.

"There, mother darling," said Blanche, an hour later, and she laid the money in her lap, "think what we can buy with all that, and say if you are not glad now that I have carried out "my programme."

THE END.

OUR FRATERNAL SOCIETY.

By DORA HOPE.

SUBJECT OF DISCUSSION: FURNITURE.

THIS month Tom was to have opened the meeting by reading a paper on furniture, and a discussion was to follow, but I am sorry to have to record that no paper was forthcoming. This was a great loss to our society, for knowing nothing on the subject, he naturally had very decided opinions. He pleaded illness as an excuse, but having had two or three days clear, it was considered salutary to inflict a small fine. The fine being paid on the spot, we proceeded to discuss the subject, which we found gave rise to a great diversity of opinion. Some of our members are æsthetic, and wish for nothing but spindle-legged tables and high-backed chairs; others like comfort, and vote for luxuriously-padded lounges; whilst the remainder are severely practical, demanding furniture that will wear well, will not harbour dust, and, above all, is in accordance with the last principles of hygiene. Consequently we had to make allowance for individual taste, and could only devote our attention to general principles, which should ensure elegance, comfort, and, above all, health.

As several members of the society were looking forward to starting housekeeping before long on their own account, we all took a practical interest in the best way of furnishing a new house. The easiest way is to put a cheque in the upholsterer's hands and leave it to him, but a good many of us thought the pleasantest way is to manage with as little furniture as possible at first, and to buy things gradually as one meets with them to one's taste, or have them made to suit the style of the house, so that the rooms seem to bud and blossom forth, and take on the impress of the owner's individuality. Unfortunately, it is generally only newly-married people who have the chance of doing this; most of us have to make ourselves and our houses suit our old family furniture. If we move, our furniture has to be forced into the new house "whether it will or no," as people say was the case with the police in olden days, when the uniform was made by contract all the same size, and if the men did not fit the clothes, all the worse for the men.

We began at the hall as the place first seen on entering a house. Margaret gave her opinion that the less furniture one could do with in a small hall the better, so as to leave room for moving about. Old-fashioned hat-stands are not often seen now. They are convenient enough in a large roomy hall, but in the small narrow ones, so commonly seen in middle-class houses, they are much in the way, and may with advantage be replaced by brass-peggs for hats and coats, over a zinc tray, with a brass rod about two feet from the ground for umbrellas. Sometimes a corner can be rounded off for the purpose, which effects a considerable saving of space. There should be at least one chair for people who have to wait, and two are better, if there is room, with a table as well. It is better, however, to be short of chairs than to have no room to show visitors out comfortably. If the hall is very narrow, and there is much passing, a

seat is sometimes arranged to let down like a flap-table, and to be raised when wanted.

As for the floor of the hall, there is nothing so clean and wholesome as tiles, especially for the part nearest the front door, where, as is so frequently the case in town houses, the hall is divided into two parts separated by curtains or a glass door. If a large space is tiled, a few rugs are necessary to prevent a chilly look, and a good front door mat is quite indispensable. Next best to tiles is a polished floor, with a few rugs which may often be taken up and shaken; a carpet is very bad for the entrance. A small table is a great convenience if there is room for it; among other things, there should be a card-tray on it, for the servant to take the cards of visitors who only call at the door.

Tom informed us that the dining-room was much the most important part of the house, and we must devote our chief attention to it accordingly. We all agreed that the bulk of the furniture should be solid, rather massive in style, but at the same time as bright and cheerful as possible in colouring: for bright surroundings certainly raise our spirits, and consequently (our medical member said) aid digestion. The general rule that rugs or squares of carpet are preferable to the big old-fashioned carpet applies especially to the dining-room, where crumbs are sure to fall, making it advisable that the carpet should be frequently shaken. Mr. Jowitz suggested that a round table is much pleasanter for a dining-table than the ordinary shape: it makes conversation more general, all guests being within speaking distance of one another. He added, for the benefit of ladies, that there should be plenty of footstools under it. Dining-room chairs, too, he said, are generally uncomfortable, and we agreed with him that more attention might be given to making them comfortable, for there are always pauses during a meal when one might just as well be resting. The sideboard or dinner waggon is the most conspicuous article of furniture besides the table, and a good deal of attention should be paid to making it ornamental as well as useful. Some have a mirror resting on it; others have a back fitted with shelves, on which plate or china is displayed. Sideboard cloths are in general use now to preserve the wood from injury.

In small houses it often happens that the dining-room has to be used as a sitting-room. This alters the arrangement of it, making it necessary to add a sofa, one or more easy-chairs, besides a bookcase and the various small articles of furniture peculiar to a living-room. If the house does not contain a library, several good bookcases will be required in different rooms; but, in any case, there should be some arrangement for books everywhere, in both bed and reception rooms. Where space is limited, shelves may be fitted into corners of the rooms to hold books or curios. These corners, indeed, might generally be turned to some good purpose, instead of being wasted as they usually are. Small cupboards or shelves fitted into them not only supply much needed accommodation, but really improve the appearance of the room, sharp angles being seldom beautiful. It is a great convenience, too, in a small household to have a speaking-tube from the dining-room to the kitchen; it can be fitted at a small cost, and saves much trouble.

The doctor here interposed to try and impress on the minds of the society the necessity of avoiding fluffy woollen mats, woollen fringe over the window, and all similar contrivances, which, he says, hold every particle of dust and dirt, and in case of infection make it nearly impossible to get the place thoroughly purified.

The furniture of the drawing-room awakened a lively discussion. The general idea in the

masculine mind present seemed to be of small tables that always upset, chairs too light to sit comfortably upon, with the backs encumbered with what they profanely called "folderols." Of course, we did not allow this to be the case, and Margaret said she always provided one or two solid, unadorned chairs in a place of safety for her gentlemen visitors, away from the little tables which she admitted she liked to have about.

This is the room best adapted to piecemeal furnishing, though there should be some general idea. It was one of the manly ideas, and I thought a good one, to have a centre to work from. This is most naturally the fireplace, where in winter we first look on entering a room. Chimney pieces and overmantels are made now in one piece of oak, mahogany, or other wood. The over-mantel is fitted with shelves and recesses for china, or sometimes with carved or painted panels, and with a small bevelled mirror in the centre, and other small ones introduced between the shelves. There is frequently a difficulty in small drawing-rooms in making any accommodation for books, but one of our members brought an illustrated catalogue from a furnisher's, showing some charming hanging bookcases and cabinets suitable for a drawing-room. The piano is generally ugly and inartistic; if possible, it may be fitted into a recess, or pulled out from the wall so that the back shows. The back may be covered with fluted cretonne, or with whatever the room is upholstered in. A small writing table is a convenience in the room, and a rather larger one for games, afternoon tea, and other like things.

Double drawing-rooms offer considerable scope for adornment. They look best divided by heavy curtains of plush, or other rich material; and the corners will generally afford a tempting niche for a tall palm or cluster of pampas grass. In addition to the usual easy chairs and sofas there is a convenient fashion now in vogue of having a settee against the wall at one side of the room. They are often made to fit into a corner so as to form either a comfortable lounge or a convenient seat for a *tête-à-tête* conversation; a pile of cushions lies at one end, and can be arranged to suit individual taste and comfort. This room should, and generally does, show the taste of its owner. It should be thoroughly original, should be light and pretty, a room for rest and relaxation, and in which everyone should be at their ease. Some drawing rooms are stiff, rich, and gorgeous, most depressing to the spirits, giving the sensation that, in my old nurse's words, we must "behave pretty" while we are in them, and vividly recalling "the best parlour" of a lower rank of life. This we agree is just what the room should not be.

Rugs and polished wood floor is nicest for the room; in very hot weather the rugs are often exchanged for India and other matting. Old-fashioned fenders are not used much now; tiled hearths and stone, marble, or glazed faience fenders look much better, and are more easily kept clean.

The morning-room is generally the cosiest room in the house; the place where one is allowed to leave one's things about in comfortable untidiness. It should have a well-fitted writing-table, and, if possible, a piano. There should be some ordinary straight chairs, too, for real work, or for use at the breakfast-table, if breakfast is served there. For ease, nothing is nicer for a morning-room than bamboo or Austrian bent wood furniture. Couches, reclining and rocking chairs in these materials are pretty and comfortable; and they are so light and inexpensive that they are just the thing for carrying out to a verandah or garden. A small wicker table is useful for the same purpose, and in winter, when the garden has no charms, it can be brought up

with one's work to a cosy corner by the fire.

We left the consideration of bedrooms till the last, though from the health point of view they are the most important of all. Even without sickness people spend a large part of their lives in their bedrooms, either conscious or unconscious. This room, consequently, should be particularly well-ventilated, and free from draughts and smells, for when asleep we are easily injured by foul air, and less able to move out of a draught. When we awake in the morning the air should be as pure and sweet as at any other time of the day. The bed-clothes should be light and warm; eider-down quilts being much superior in this respect to the old-fashioned heavy quilts and many blankets. In summer light Madras muslin makes a nice quilt, which can also be used under the eider-down for winter. The bedsteads should be of metal; it is much cleaner and lighter than the old-fashioned wood. Woollen valances and bed hangings are very effectual traps for dust or dirt. Many people disapprove of them entirely; but if the room is draughty, and some protection is necessary, the curtains should be of some washing material that will show dirt. The bed should not be placed between the door or window and fireplace, as the draught would be greatest there. There are many kinds of spring mattresses now that can be fitted to any bed, and which are healthy as well as comfortable.

The bedroom corners may be rounded off with cupboards and shelves, and put to great use for all the trifles that generally lie about in a bedroom. It is a great mistake, however, to have cupboard for hanging dresses reaching but three parts of the way up the wall, as one so often sees them. If boxes are put on the top they look unsightly in the extreme, and if not used at all it is a refuge for dirt, which the height of the cupboard renders it impossible to dust regularly.

An additional cupboard carried up to the ceiling prevents lodgment of dust and is a convenient receptacle for storing articles not in daily use, such as winter clothing during summer. There should be a comfortable chair in each bedroom, and, at any rate in summer, appliances for reading and writing.

The white painted wood fashionable just now cannot be recommended; it is impossible to avoid finger marks where drawers and cupboards are opened, and as soon as the pure white is in the least sullied the beauty is gone. The manufacturers will say that the paint can always be washed, which is quite true; but, as all old housekeepers know, even the best of paint will begin to wear off after two or three washings.

Spare bedrooms should each be provided with a luggage stool to save visitors the discomfort of stooping to the floor to unpack their trunks, or injuring the furniture by setting their luggage on chairs to save their backs. A boot-stand is another convenience which is not often provided. If there is no dressing-room or curtained recess for dressing apparatus, a screen is very useful, especially in cases of sickness. In the mistress's room or other safe place, a locked cupboard for medicine and medical necessities is an important adjunct.

Margaret gave us a very emphatic warning against buying furniture from any but a thoroughly trustworthy tradesman. Otherwise, in the course of a few months drawers refuse to shut and cracks appear in every direction. She also warned us against buying articles, however good, in accordance with any temporary fashion unless they are really good and elegant in themselves. Curious fashions soon die out, and the furniture will then look peculiar and old-fashioned at once.

(To be continued.)

ROBERT COCKS AND CO.

Years Agone. Words by Magdeline Wycombe. Music by C. Flavell Hayward.—A charming and well written song, full of piquancy, sure to become a favourite.

A. Cox.

My Lady Barbara. Composed for the pianoforte by T. Merton Clark.—A bright and exceedingly well written piece, presenting no difficulties. We recommend it to our young rising pianists.

LAMPO AND CARMELA.

FROM THE ITALIAN OF ENRICO CASTELNUOVO.

CHAPTER II.



HE moon had disappeared behind the mountains; the air was fresh and invigorating; the birds, quitting their nests, flew from branch to branch, to the tops of the firs, to await the dawn which already whitened the extreme edge of the horizon. At first they only uttered low notes, timid calls; then, from right, from left, each call was answered, and by degrees a lively chirping, accompanied by a fluttering of wings, filled the greater part of the wood; but further on it was as dark as ever. Carmela hurried along the steep path, and wearily mounting the steepest bit, finally reached the summit, astonished at seeing the tops of the firs beneath her feet. Tired out, she threw herself on the soft dewy grass. The mist was still hanging over the valley; only the outlines of the hills were seen distinctly against the grey background of the sky. The keen air had awakened the child's appetite. Taking the slice of polenta from her pocket, she first broke off a piece for herself, giving another piece to Lampo, who, having fasted for so many hours, seemed very grateful, and looked for more; but remembering she had no other provision for the journey, she thought it as well to keep a small reserve.

Meanwhile all the wonders of the awakening dawn spread before the child's delighted gaze. She had often risen before daylight, but in the narrow valley of Isoletta the early morning was very different to here, where the eye commanded so vast an horizon. The dark uniformity of the sky took by degrees different aspects and colours. Where at first there was only a thick mist, a hundred

light and rosy cloudlets had formed themselves, and in the uttermost east glowed a vivid tint of pomegranate. The mist which lay at the bottom of the valley seemed gradually to tear asunder like a veil, revealing a thousand hidden beauties; and out of it emerged the dark masses of the trees, the carpet of the meadows, and the few huts scattered over the hillside.

A group of houses nestling round at all church spire, and, seen from this height, not appearing bigger than toyhouses of coloured wood, caught the child's eye. Could this be the village of Riviera? But the illusion only lasted an instant; for in the tall spire Carmela could not fail to recognise the *Campanile* of Isoletta!

Her heart sank within her. Surely her father and grandmother must be about walking and calling, "Carmela! Carmela!" Whilst following the current of these thoughts, the sun, appearing between the gorge of the two mountains, enveloped her in a flood of golden light; and with the sun, faith, and hope in the success of her enterprise returned to the child's heart, and she decided to continue on her way, repeating to herself her aunt's instructions:

"After this hill comes a valley, and after the valley another hill, and after that Riviera." Carmela had ascended the first hill, and it was evident that she had now to descend it. And then? Doubts and fears arose in her breast, for there were many hills on the other side of the valley, and it would not be easy to decide which was the right one.

She did not, however, lose much time in speculation, and fixed upon the easiest descent. At first the incline was gentle enough, but ere long difficulties arose. The hillside was dry and rough, the earth gave way under her feet, and at every step she slipped over a stratum of loose sand, so that, to avoid falling, she was obliged to cling to the stubble till her poor little hands were all scratched and bleeding.

For one moment she paused in doubt. Was it possible this could be the road indicated by Zia Norina? Lampo stopped also, on his four paws, with eyes intent and ears pricked up, as though considering the position; then, without going far away, and constantly turning to look at his young mistress, he continued to reconnoitre, until, having found a more commodious path, he returned, evidently begging her to follow him. So they descended by an easier path down to a limpid brook which ran murmuring between the stones and grass. Lampo, who was thirsty, pushed in his nose and drank deeply. Carmela, too, bent over the stream, taking up what water she could in her little palms to refresh her parched lips; after which, taking off her shoes and holding her petticoats up high, for the water reached to her knees, she crossed safely to the other side, Lampo following with one bound.

Weary and exhausted, she sank upon the ground, but finding after a few minutes that the murmur of the water made sleep almost irresistible, she started quickly to her feet in order not to be overcome by it. The country was again wooded with firs and larches, from which the sun drew out a strong odour of resin. Where could she be? Was she nearing her goal, or only getting further off? Oh, were there but a hut at which she might knock, a living creature of whom she might ask the way! Here and there large trunks of felled trees witnessed to the hand of man, or signs of wooden sheds betokened where the woodcutters had during many weeks passed the night, and a few blackened chips indicated the trace of charcoal-burners. But all work in the woods had ceased for a month past, and for some days yet all would remain in solitude and silence. So the child went on, stumbling

over the fallen cones of the firs, and the fungi, which grew by thousands in the moist ground, with no sound besides the humming of the insects which surrounded her, and the whisper of the trees caressed by the breeze.

By degrees the wood became thinner, and Carmela found herself at the foot of a hill, which, by its soft verdure and gentle incline, seemed to invite her to ascend. When she had got about half-way up she saw spread out before her a vast meadow which ended almost imperceptibly at the foot of sharp perpendicular rocks, like a granite wall. Not the shadow of a path, no sign by which the poor child could tell her whereabouts. Giving way to a moment of despair, she once more threw herself down upon the grass, and this time really fell asleep. Lampo lay down beside her with half open eyes and gently moving tail, ever on the alert.

At last he uttered a short suppressed bark, and Carmela, having rubbed her heavy eyelids and succeeded in rousing herself, saw, some fifty yards off, a white heifer, fixing on her its large pensive eyes. Behind this one were three or four more. They advanced with measured steps, the bells tinkling as they slowly moved their necks right and left, saluting others, who were quietly grazing a little further off, with long lowings. A little cowherd about twelve years old was guiding the whole flock, which counted about thirty head; and at his side walked a big collie dog, who, on perceiving Lampo, rushed at him, barking and growling angrily. But Lampo was not a dog to be easily frightened. Taking up a position of defence, with his eyes shining, his teeth showing, his tail erect, he kept his enemy at bay. Thus the two beasts stood looking at each other, about twenty paces apart, ready to commence the fight. Carmela, who had by this time risen to her feet, was trembling all over, and unable to stir from the spot. Meanwhile, the little cowherd, attracted by the noise, hastened his steps, calling to his dog, "Turco, Turco, come hither!" The ferocious monster reluctantly obeyed, upon which Lampo, seeing that his adversary had abandoned the position, took up a less hostile attitude. A truce having thus been established between the rival powers, the boy approached Carmela, and asked whence she came and whither she was bound. In a faint voice, she informed him she came from Isoletta, and was on her way to Riviera, which place she wished to reach as quickly as possible.

"Riviera!" repeated the boy, as though trying to understand. "But this is not the road to Riviera!"

"Oh, which road then?" she inquired, turning very pale.

(To be continued.)

OUR FRATERNAL SOCIETY.

By DORA HOPE.

SUBJECT OF DISCUSSION: HOW TO DECORATE WALLS.



IF we had been systematic, I suppose we should have studied the subject of wall decorations before anything else in the house, but it falls to my lot, as secretary, to arrange the subjects, and, as I am unfortunately not systematic, it did not

occur to me till too late. My mistake in the proper order called forth a ridiculous tale from Tom about some foreign country or other, where the inhabitants always put on

the roofs of their houses first, and stock the rooms with furniture, and then build the walls to fit; but I am used to jibes, and bear them with resignation.

We found that the subject had a wider range than we expected, but we confined ourselves to a very few branches of it. First, we considered the papering and colouring of the inside walls of an ordinary house, and we concluded that it was the best policy to go to a thoroughly good agent for wall hangings, where one can depend upon being served with paper that does not contain arsenic, and where the attendants have had sufficient experience to be able to give really good advice as to the effect of the various papers when hung. They look so different in small pieces that people are often greatly disappointed with the effect as a whole, unless they have someone with experience to advise them.

On the subject of arsenic in papers, the learned members of our society gave us a good deal of information that was new, at least to me. They say that arsenic is not used solely in green papers, as I had imagined, but also in brown, blue; red, purple, and French grey, in fact in almost every colour. Probably people have got a different idea, from the fact that it was first used for certain shades of green. A great deal of disease is caused by poisoning from arsenic, though it is so difficult to trace the cause that the real origin of the mischief often escapes notice. When actual illness does not result, there is a general lowering of the health, with headache, loss of appetite, depression of spirits, sleeplessness, and other rather vague and indefinite symptoms. Frequently the only way in which the cause of the disorder can be traced is by observing that the symptoms are worse when the room is closely shut up. The paper in which arsenical dyes have been used throws off poisonous particles, which mingle with the air, and are taken into the lungs of the inhabitants. In the Health Exhibition there were several specimens of paper shown, with labels attached giving thrilling narratives of the serious illnesses which had been caused by those identical papers. One gentleman had been seized with symptoms of arsenical poisoning after dusting his books, on which, of course, all the fine poisonous particles of dust had settled themselves; and several workmen had nearly died in consequence of the quantity of poison they had inhaled while hanging some of these papers.

We were told that the small retail dealers really do not know whether the papers are arsenical or not, as almost as good colours can be procured from harmless substances, but the poisonous ones can be produced at a rather smaller cost, and consequently some dishonest manufacturers use them for the sake of the greater profit.

Not only papers, but even chintz bedhangings, stockings, gloves, and all sorts of other articles are dyed in this way, and a great deal of ill-health is the consequence.

Even supposing they are quite free from arsenic, all papers, flock or otherwise, with patterns which stand out in relief, and so afford a lodgment for dust, are injurious. The fashionable Japanese leather papers, Lincrusta Walton, and others of a like nature, are open to this objection, though to a much less extent than the old-fashioned rough flock ones, the new style having the advantage of being smooth, frequently having a glazed surface, so that they can be easily cleaned with a feather brush. Those papers in which the pattern in relief is slightly rounded, hold dust less than those where straight ledges are introduced.

Another frequent cause of ill-health is the bad nature of the size or paste with which ordinary wall papers are hung; box makers think that paste sticks better after it has turned sour, and apparently paper-hangers are of the same

opinion; at any rate, it is certain that they sometimes use it in a decidedly putrefactive state. When an unpleasant smell is noticed after the work is finished, the only way to make the room really wholesome again is to have the paper stripped off and the room re-hung.

Some people, who want their work done quickly and cheaply, have new papers pasted on the walls over the old ones, which are probably covered with the dust and smoke of years. Anyone who will give a moment's consideration to the well-established fact that dust and dirt of any kind hold and nourish any germs of disease which may be floating about, will see how foolish an economy this is; the old paper should always be stripped off and the walls washed down before the new paper is hung.

Having taken in all this information about paper, looked at from a sanitary point of view, we next proceeded to consider the subject in its æsthetic light. After much discussion we drew up what we considered a few general rules for the guidance of several of our members who are thinking of setting up housekeeping for themselves.

We decided that perpendicular patterns add to the apparent height of a room, while horizontal lines lessen it. A dado, or dark heavy frieze especially, make a room much lower, and the same effect is produced by a large or dark pattern of any kind. A light paper, with rather small pattern, and no horizontal lines should always be chosen, therefore, for a small room. The effect of colour should be remembered, too, in producing sensations of warmth and coolness. A warm room, with a south aspect and much sun, should have a paper of a cool shade, such as green, or grey; whilst rooms with a north or east aspect should have warm colouring. The walls of badly lighted rooms should have a yellow tone in their hangings; this colour gives a feeling of light even in dark rooms.

One of our members read us an extract from a paper describing some experiments a French doctor has been making lately as to the effects of colours on dogs. He says that he kept a number of puppies confined in boxes, each with a different coloured light, one blue, one red, and so on; and he affirms that the colour so much affected the disposition of the dog, that he could always tell beforehand, in a long series of experiments, what the temper of each dog would be after a few weeks' incarceration in any particular colour.

I do not know whether this account is true, though it was reported as true in the newspapers, but as the member who read it said, it illustrates his argument that though we may not actually pay much attention to the walls of the rooms in which we live, we are none the less unconsciously affected by them, as well as by all our other surroundings, and it is our duty, therefore, not only to have them of wholesome materials, but in design and colour as good as we can get them.

A dado should never reach exactly to the middle of the wall, so as to give the effect of cutting the room in two; it should be either rather higher or lower. As a rule, it does not look well less than three feet six inches high.

We agreed that kitchens should have either glazed paper or oil paint, both of which can be frequently washed, and a space round the sinks, and any other part of the kitchens likely to get much splashed or soiled should, if possible, be tiled; no paper, however well glazed, will stand constant splashing. If tiles are too expensive, whitewash is the best round a sink, and the servants should be supplied with a small quantity of whitewash and a brush that they may frequently give a fresh coat to the few feet of wall which gets soiled.

Nursery walls, too, should be washable. There might be a dado as high as the little ones can

reach of ornamental tiles, or a pretty varnished paper, with paint above. The bathroom too, must, of course, have tiles or glazed paper.

The members of our society all agreed fairly well as to the rules for choosing papers, supposing that one has papers at all; but they were by no means of one mind as to the advisability of that method of covering the walls. Some would have nothing but paint, others cared only for substances like Lincrusta Walton; while one expressed her love for tapestry hangings and rich heavy curtains. She was, of course, promptly put down by the doctor, who said they were relics of a barbarous age, when they were necessary to keep out draughts, and that the way they held dust made them perfect traps for disease. She was not entirely subdued, however, and favoured the company with a description of the wall decorations in the library of the Health Exhibition, which she was determined to imitate if ever she could decorate a room according to her own ideas. The library had a dado (in the gaps between the bookcases) of thick Turkish tapestry, with heavy curtains of the same at the windows. The door was completely covered with tapestry to match, so that having a door at all instead of curtains did not look incongruous. The upper part of the walls was covered with flutings from the ceiling to the dado, of a light straw-coloured material, and the general effect, she said, was very rich and handsome.

The great advantage of paint over paper is, of course, that it can be periodically washed; but all good dealers will now supply papers of all kinds with glazed surfaces, suitable for drawing rooms as well as kitchens, all of which can be washed with a damp cloth. One of our members brought us specimens of paper such as can be procured now by all decorators, which are treated with some preparation of asbestos, which make them absolutely fire-proof; they are also warranted not to be injured by washing. There are many fire-proof and damp-proof solutions made now also with which ceilings and walls can be painted before the paper is hung, if that method is preferred. Dr. Richardson recommends having the walls of living rooms lined with glazed tiles, which could be impervious to damp, and could be washed and dried, but this rather expensive method seems hardly necessary now that so many "washable" papers and paints have been invented.

The mention of damp walls called forth the information from another member that several new solutions have been discovered lately for remedying this very common trouble. Some are intended for use outside the house; but where the damp has come right through it is generally necessary to have the paper stripped off, and the wall thoroughly scrubbed and dried before being painted with the water-proof solution. Ordinary papers may be put on over this as soon as the coating is dry; or if preferred, some of the solutions are prepared as paint to be used without papering. These preparations are said to be a great comfort in damp cupboards and corners, which have hitherto been quite useless.

We agreed that we all liked the ceiling tinted a few shades lighter than the colour of the walls, from which it should be divided by as simple a moulding as possible, in the painting of which both shades of colour should be introduced. If the room is papered, the principal colours of the paper should be reproduced in the cornice, and the ceiling painted to correspond with the back ground of the paper, unless this is dark, in which case one of the lighter colours must be chosen. Immediately below the cornice there should be, if possible, a brass picture rod.

In considering the colour of the hall, Margaret advised that attention should be paid

not only to its effect in itself, but also to its harmonising to some extent with the colours of the rooms which open into it. She told us of a house where she had been staying lately, in which the hall had been painted a very bright colour that looked very well by itself, but clashed so violently with the colours of the adjoining rooms that the doors had always to be kept shut.

It was suggested that as ventilation is generally secured by apertures of some kind in the walls, we ought to consider that subject in connection with them; but we found it too wide to take up at the close of another discussion, so had to content ourselves with a few of the most important general ideas, leaving details for some more favourable occasion.

Our doctor, who naturally knew most about the subject, says that the most elaborate systems do not always answer the best, also that draughts, so far from being necessary to ventilation, show that it is very imperfect. The ventilators, whether in the windows or walls, should always be above the level of the gas (if gas is used), as hot and foul air always ascends, and should have an aperture by which to escape. Another aperture of some kind lower down is, however, necessary also to supply fresh air to take the place of that which escapes. Perhaps the most satisfactory arrangement is a very simple one which was exhibited at the Sanitary House in the Health Exhibition. It is merely an extra piece of wood across the bottom of the window, and fixed to the window-frame on each side. By this means ventilation can be obtained when it is too cold to have the window wide open, for if it is raised just to the level of the top of the wood this prevents any wind blowing straight into the room, but allows a current of air to rise upwards to take the place of that which has escaped by the other ventilator.

The ventilation of bedrooms is of course the most important of all; headaches and a feeling of heaviness and stupor in the morning so often are caused by sleeping in a close, "stuffy" bedroom.

This being our last meeting for the year, we closed with a general vote of thanks for the valuable information we had each afforded to the society, after which it only remained for us to decide what should be done with the fines which had been imposed upon the members who had neglected to study the subjects selected. As they did not amount to a very large sum, it was suggested to spend the amount in fruit for the children at the convalescent home near our village. The doctor objected, and said it was very bad for them; but as he was the only objector he was obliged to give in, and was actually so inconsistent as to come with us yesterday to distribute the fruit.

ANSWERS TO CORRESPONDENTS.

MUSIC.

- LITTLE NELL.**—After learning the major scales in sharps and flats, learn the minor scales.
- FRANK'S NELLIE.**—You had better get Novello's handbook on the subject.
- POINTZ.**—Write for the prospectus of the Royal College of Music, Kensington Gore, S.W.; secretary, Charles Morley, Esq. We believe that the college to which you refer has ceased to exist.
- FORGET-ME-NOT.**—The Chiroplast is a small machine invented by John Bernard Logier, about 1815, to keep the hands and fingers of young pianoforte players in the right position.
- FLORIDA.**—Surely any musical friend could tell you whether you have any talent for the art—a good ear for time and tune, and any executive power. 2. As a companion to a lady, you should write, and spell, and express yourself well, so as to act as secretary; you should read well, keep accounts correctly, play, and, perhaps, sing, know how to keep house, and make yourself generally useful and agreeable. Above all, you should make your employer your study, so as to accommodate yourself to her ways and peculiarities, and look bright and pleasant,

giving her all the news you can pick up, if an elderly person or invalid, to divert her thoughts.

COOKERY.

A KENTISH NELLIE.—Oatmeal porridge.—Put into a saucepan as much water as will be needed. When it comes to a boil put in a little salt. Take a wooden spoon in your right hand, and with your left sprinkle in some oatmeal gradually, stirring briskly all the time. If any lumps should form, draw them to the side of the pan, and crush them out. About two handfuls of oatmeal would be sufficient for a quart of water, but the thickness depends on individual taste; also on the oatmeal itself, as some kinds of oatmeal will thicken more than others. Draw the pan a little back, put on the lid, and let the contents simmer gently till wanted, stirring frequently, and always replacing the lid. Porridge should never be boiled less than half an hour, but if it can have an hour it is all the better for it, and less oatmeal is then required.

SORROWFUL ANN.—Thank you for your recipe, which we are pleased to give. We think that a small spoonful of baking powder added to it might be an improvement. **Railway Pudding.**—Take two ounces of butter, two ounces of sugar, two ounces of flour, one egg, and half a teacup of sweet milk. Beat the butter to a cream, then add the egg and sugar, and lastly the flour. Beat well, bake on two well-buttered plates for about fifteen minutes, and when cold, spread some jam on one, and place the other on the top, and put into the oven to get hot. It may, however, be eaten either hot or cold.

A JERSEY ROSE.—Scotch shortbread is made as follows:—Take half a pound of butter, half a pound of sugar, half a pound of flour, four eggs, quarter of a pound of mixed candied peel, in equal parts, a very little salt, and two ounces of white comfits. Beat the butter with a wooden spoon to a cream, then add the eggs, sugar, and flour gradually, putting in a little of each, and one egg at a time. When the whole is well mixed, the candied peel cut in shreds should be added. Put the paste into tins of an oblong shape, about two inches deep, well buttered first; strew the comfits over the top, and also a little fine sugar, before placing them in the oven. Bake to a very light colour.

A CURIOUS ONE.—You will find many good recipes for summer drinks in an article by Medicus on page 547, No. 74, vol. ii.

MADEMOISELLE.—Buns made with yeast.—Take three pounds of flour, put it in a pan, form a hole in the middle of the heap of flour, and pour into the hole half a cupful of good, but not bitter, yeast, also half a pint of lukewarm milk. Mix well together the yeast, milk, and a little of the flour. Leave it to rise for an hour in a warm place. When well risen add to it half a pint more milk, quarter of a pound butter melted. Mix well with the fermented part and the rest of the flour, adding more milk if necessary, to make a dough not quite so stiff as for bread. Set it again aside, and when well risen, form into buns, and put on buttered tins, in a warm place, to rise. When again well risen, bake in a hot oven, and when baked, and while yet hot, wash over the tops with a little milk, to give them a gloss.

EDUCATIONAL.

ANNIE JAMES.—We thank you for informing us of your essay club, of which you are the secretary. We have not got one of this kind amongst the many on our list, so we are glad to give the address for the benefit of our girls—Miss Annie James, secretary, Tutshill Villa, Tutshill, near Chipstow.

J. I. P.—To write well in shorthand, from six months to a year's study would be required. It is not too difficult for any girl of average ability, and it is not very trying to the eyes. We have more than once given a recipe for cleaning filagree silver. Write to the College of Preceptors for their prospectus; they will answer any extra question. Address secretary, 42, Queen-square, Bloomsbury, W.C.

VIOLET HAYDEN.—The educational works of Dr. Angus may be had in our publishing office. The word "were" is used in the subjunctive mood. It is employed in a conditional, not a positive sense; i.e., "If I were," not "If I was;" "Were I going to Boston," not "Was I going." Study the "Handbook of the English Tongue." The word "Haricot" is French, and is pronounced "Ha-re-ko."

IRENE will obtain all particulars respecting a reading society from Miss McLandsborough, Lindum Terrace, Manningham, Bradford, Yorkshire. If you have a good eye, you may be able to do crewel work without it being traced for you. Why not send for transfer and tracing paper, and transfer the design yourself?

HAPPY CATHERINE.—We read your letter with interest, and wish you God-speed in your endeavours to requite your parents, and pay, so far as in you lies, and by God's grace, your still greater debt to your heavenly Father. You should study any history of England which you may possess, any book of geography, and an atlas (maps). Learn cookery by all means, and good plain sewing, darning, and knitting. You should always have a warm stocking or sock on hand, to take up when the light fails, and at odd leisure moments. Unless your parents wish you to leave home, and earn for yourself, you can be of much service at home, as you are still so young.

MVRA W. and ERIC BURKENSTAFF.—Write for particulars to the secretary, Civil Service Department, Cannon-row, S.W. Your handwriting, we think, would be sufficiently good; but the existing competition for these Government appointments is so very great that we do not encourage you to expect success.

HENRY SERRING.—We have pleasure in drawing attention to the existence of so useful a club, designed to promote home study, of which the summer term commences on April 1st, the autumn on September 1st, and the spring January 1st. The hon. sec. of the Study Club is Miss L. E. Ryal, Orpington, Kent; and the hon. treasurer, Miss Lily Bristow, 2, Cedars-road, Clapham Common, S.W.

IMMEDIATE.—The sum paid to a holiday governess is a matter of mutual agreement between the parties concerned, and many governesses are anxious to find change of air and scene without asking for a salary, or only receiving payment for lessons such as music or drawing.

MISCELLANEOUS.

A LOVER OF PAINTING.—We cannot give advice as to the good faith or otherwise of the advertisement, as we know nothing of it.

UNDECIDED KATE.—We see nothing wrong in your writing to him on the subject of your guardian's health. Of course, it will depend on yourself to prevent the exchange of letters which may follow becoming a correspondence, which should be avoided unless you have the sanction of your friends.

A MARTYR should get some friend in town to go to the shop and make inquiries. Is she quite sure that the letter containing her stamps was properly posted and received?

LADY WOOD had better leave her complexion alone and attend to her spelling. There are four serious faults in her short note. Even the desire for "whiting her complexion" cannot excuse such a deficiency.

MARGUERITE and ORANGE BLOSSOM must steam the crape over boiling water. Any spots may be touched with benzine. Wear black, or black and white, and leave off crape entirely. You do not say for whom the mourning was.

ROUGE NOIR.—The bracket may be cleaned with furniture polish, or else with turpentine and bees-wax.

NANCY GLAN TEIFY.—We are much obliged by your kind note, but we cannot say that we admire your handwriting.

A. W.—The duties of the best man at a wedding consist in waiting upon the bridegroom, and so to leave him free to concentrate his whole thoughts upon his bride. He pays fees, sees that the carriages are all in readiness going and returning from church, takes the first bridesmaid down to breakfast, and afterwards, if healths be drunk, he returns thanks for the bridesmaids.

ONE IN TROUBLE.—You have done quite right in visiting your future husband's relations, if they asked you to do so. It is the usual course to adopt. The last question is a matter for your own personal consideration only.

J. E. R.—We do not see any objection to your being a teacher of shorthand if you be fully qualified for the undertaking.

BROWNIE.—We advise all our girls to learn swimming. It is both useful and healthful; but beware of remaining too long in the water.

EDITH.—The lines, "Art is long and time is fleeting," were composed by Longfellow.

WHISTON.—We cannot give the address of our contributor, but we shall be glad to forward any letters you may send.

FLORENCE MARSH.—We are much obliged to you for your kind and ladylike letter. You must not forget that we are "not obliged" to answer anyone, nor even do we undertake to answer all. What advice and help we can give we are glad to offer freely and without cost to our readers; but they need not write unless they like to do so.

BALLAST.—1. When a ship is overlaid and in danger under rough weather, it is often necessary to lighten her by throwing part of her cargo overboard, which proceeding is described as "to jettison" the ship, from the French word *jeter*, "to throw away." 2. The terms "liquid" and "fluid" are commonly employed synonymously, but the latter has a broader signification than the former. All liquids are fluids, but some fluids (such as air) are not liquids.

A SUBSCRIBER.—You had better go to St. John's Hospital, in Leicester-square, to obtain advice respecting any skin disease.

INQUISITIVE MATTY.—You will find an account of the origin of Easter eggs at page 393, vol. ii.

ROSAMOND.—The old tax called "hearth money," "fumage," or "fnage," called by the common people "smoke farthings," was paid, according to "Doomsday Book," for every chimney in a house. It would be a desirable tax in the present day to tax smoke! After his victories in France, Edward the Black Prince imposed a tax of one florin on every hearth in his French dominions.

SISTER BESSIE.—We do indeed feel for you, although you have so much to comfort you in your repeated bereavements. We shall always be glad to hear of you, and are thankful that our paper has been valued by those that are gone as well as by yourself. May you be long spared any further losses of such a kind.