

Now we have returned to the period at which we left oratorio, and side by side with Bach's great Passion music stand up those massive monuments, the oratorios of Handel, of which so much has been written, and many of which you all know and love so well. It is worthy of notice, if only to show how recently (*viz.*, almost halfway through the eighteenth century) action, and costume, and other accessories were tolerated in connection with the sacred subjects, to tell you that at the performance of his first English oratorio, "Esther," at the theatre in the Haymarket, Handel appended the following note to the play-bills:—

"N.B. There will be no acting on the stage," this being called shortly after "oratorio fashion," even when applied to performances

of secular dramatic subjects, which were to be sung, and not acted.

After these great works of Handel, no important oratorio was heard in England until Haydn's "Creation," in 1798. Then, in the present century, Spohr followed with his "Crucifixion," "Last Judgment," and "Fall of Babylon;" and then Mendelssohn, that greatest disciple of Bach, whose "Elijah" and "St. Paul" quite revived the taste for oratorio, and gave an impetus to it, which extends to our day.

To end this fragmentary sketch, we may fairly say that oratorio should contain two important elements:—

I. The narrative form, as subject of the whole work.

II. The didactic and contemplative, as

interpolations in soliloquy, or in chorus of adoration, prayer, and warning.

A third element, the dramatic accessories of costume, scenery, and action, we have dispensed with, and, I think, happily so.

We find in these days in many nations, including our own dear country, composers are striving after this highest and noblest ideal; let us pray they may receive that strength necessary for so great a responsibility. There is none greater in music, and our hearts tell us that unless a composer knows and believes himself that the subject which in reverence he approaches is the truth itself, which he must proclaim and preach as a conviction of his own—we say that unless he thus incorporates himself in his work it is but mockery, and the result of it nothingness.

NOTES FOR NOVEMBER.



URING this month we get the finest effects of the changing tints of foliage; after a wet, windy summer the colours are poor, but fine and varied after dry calm weather.

These autumnal changes of colour are caused by decay and death; the life in the leaf enabled it to withstand certain chemical changes, which it can no longer resist as the vital force wanes, and the green colouring matter is either changed or destroyed.

We can prove this fact for ourselves if we notice how often, while all the rest of a tree is green, the leaves and small branches which are partly broken, and have, therefore, lost a great part of their vitality, lose their green colour, and become yellow or red.

Not only are the broad effects of a landscape made beautiful in autumn by the rich colouring of large masses of trees, but the close observer will find every hedge, bottom, and wild common flaming with colour. Heath tell us "it is the commonest plants whose colours are the most beautiful and striking." Amongst those which produce the most brilliant autumnal tints, the following are found almost everywhere in the hedges in England: Bramble, hawthorn, wild strawberry, dock, spindle-tree, herb robert, cranes-bill, silver weed, hedge maple, dogwood, black bryony, ivy; while in the kitchen gardens nothing can exceed the beauty of the asparagus and the common carrot.

Many birds come to England from the north to spend the winter. Wild ducks, woodcocks, fieldfares, and curlews are coming now, besides thrushes, larks, and other small birds. Some of these live with us all through the year, and are only joined by relatives from colder climates. In very cold winters many birds who do not usually migrate, are driven south in search of

food; but the reception they meet with is hardly calculated to attract great numbers of strangers to our shores; for the notice one usually reads in the newspapers is that such and such a rare bird "has been seen and shot."

"It is as hot as we have it in India, or, at any rate, I feel the heat as much." One often hears this statement on a hot summer's day from an Indian visitor; while, on the other hand, our Canadian cousins assure us that their bright, clear winter, though so intensely cold, is not so trying as ours. This is to a great extent caused by the unusual moisture of the air in England. John Burroughs tell us that "the average rainfall in London is less than in New York, and yet it doubtless rains ten days in the former to one in the latter," which he explains by the fact that in England "it rains easily, but slowly."

That we can bear greater dry than damp heat is easily proved by holding one's hand before a fire, and then plunging it into hot water, using a thermometer in both cases to test the heat. The same fact with regard to cold can be tried by holding both hands in a draught of cold air, the one hand being wet, the other dry.

Lovers of natural history are not all aware what advantages the first sharp frost offers them for the study of animal and vegetable life in ponds. Thoreau, one of the most devoted admirers of nature, says in his "Walden," that, "The first ice is especially interesting, being hard, dark, and transparent, and affords the best opportunity that ever offers for examining the bottom, where it is shallow; for you can lie at your length on ice only an inch thick, like a skater insect on the surface of the water, and study the bottom at your leisure, only two or three inches distant, like a picture behind a glass."

Country girls have an opportunity during the early darkness of winter afternoons of appreciating one of the dangers which beset

arctic explorers during the long twilight which takes the place of day during the winter months in those northern climes. In towns, the well-lighted and well-paved streets make walking in the dusk as easy as in the day; but girls, whose walks lead through fields and rough country lanes, know how many trips and stumbles are caused by the uncertain light before darkness sets in. Greely, in his terribly sad history of the sufferings of his men during their arctic expedition, tells us how much their difficulties were increased by this dimness of the light. It was necessary that they should go long journeys on foot, each man carrying a heavy load of provisions and other stores; and he adds: "The absence of sufficient light to cast a shadow has had very unfortunate results, as several of the men have been badly bruised and sprained. When no shadow is formed, and the light is feeble and blurred, there is the same uncertainty about one's walk as if the deepest darkness prevailed. The most careful observation fails to advise you as to whether the next step is to lie on a level, up an incline, or over a precipice. A few bad falls quite demoralise a man, and make him more than ever distrustful of his eyesight."

There is not much to be done in the garden this month, but bulbs may still be put in, though the flowers will not be so good as those planted earlier. Hyacinths, narcissi, and tulips planted now ought to flower in April.

If the weather is mild, the grass should be rolled occasionally; early peas and beans may be planted in a dry place, and a little radish seed sown in a warm corner, but they must be carefully covered if a sharp frost comes.

Green hedges should be clipped, and shrubs needing it pruned. Now that the leaves are off, the fruit trees may be more easily examined, and dead branches, or those that rub against one another, removed.

If the weather is very cold, take care of delicate plants by spreading cocoa-nut fibre or light manure over the beds, or by covering the plants with matting.



whereas in reality she had been going every Sunday to visit some friends whom she knew would be disapproved of both by her mistress and her teacher.

However, happily for all parties, matters were coming to a crisis.

Ella went, as usual, one morning to speak to the old gardener, whom she found digging in a secluded corner of the garden, with the ducks following closely at his heels, and poking with their flat bills into the freshly-turned earth, searching for worms or any other choice morsels that good fortune might bring in their way.

The old man evidently had something on his mind, and, after the usual greetings and

inquiries after Mrs. Wilson, he stuck his spade into the earth and leaned his arms on the top of it, as if prepared for a long conversation; at which the old drake cocked his head on one side, and stared at him out of one eye with an air of virtuous indignation at having his own labours interrupted in this way.

The conversation did not seem easy to begin, however, and it was only after a good deal of hesitation that he said at last—

"I've lived along of the missus now these forty year."

"Yes, I know you have, Mallard. Why, I remember you all my life," replied Ella, wondering what was coming.

"Well, Miss Ella, I ain't told no tales, and

I ain't goin' to tell no tales; but what I say I say; and that is as 'ow *there's things goes* on in this 'ouse as 'adn't ought to; and I ain't lived along o' the family, man and boy, these forty years without knowin' as when the doors is locked at night they ought to be locked, and not so many goin' in and out as what there is."

And having finished this enigmatical speech, accompanied by many mysterious nods and winks, the old man pulled up his spade, and, touching his hat to Ella, disappeared amongst the bushes, leaving Ella and the ducks gazing after him in mutual astonishment.

(To be continued.)

NOTES FOR FEBRUARY.

A PAPER in *Science Gossip* for August, 1886, gives a very interesting description of the sprouting of a sycamore seed.

These seeds have wings especially adapted for floating a heavy body. In November they are caught by the wind, and whirl round and round till they reach the earth. They always grow in pairs, although, if looked for now among the grass or on the wayside, many of them will be found single, having been separated from their companions. If a few of the double seeds are brought into the house, placed in a warm situation under a bell glass, and kept watered, their growth may be watched, and some marvels of nature learned.

Every process is wonderful; the separation of the double seed, showing their junction to the stalk, then the appearance of the rootlets which are the first signs of growth, and then the cotyledons, or "nursing leaves," whose function in life is to nourish and protect the pair of true leaves hidden within their embrace, till they are strong enough to defend themselves, when the cotyledons fall off and die.

The folding of the cotyledon is a study in itself. "They are folded so as to occupy the least space, *i.e.*, first fold in half, and then in half again, like a ribbon reduplicate, and not coiled round (circinate) like a fern frond, which, growing later in the season, requires less protection."

So the life goes on, showing fresh wonders and beauties at every stage of its growth, each step showing the wisdom and love of the great Creator and Designer.

Plants grown indoors need constant care; it is advisable only to keep as many as can be properly attended to. Very few can stand gas, and all thrive better if removed when it

is lighted. The watering, too, needs careful attention; they should not be kept too wet during the cold weather, although they must never get quite dry. They need plenty of light, so it is important that the windows should be kept clean, to allow a full measure of sunshine. The pots must be kept clean, and when a green growth appears on the outside they should be well scrubbed. They must not stand in a draught, which causes a chill, and checks the growth of the plants.

Outdoor gardening this month depends greatly on the weather. If cold, all tender plants must still be protected, and even if warm they should not be encouraged to grow, as frosts may be expected for some time to come yet. Unless it is actually frosty, rose-trees needing it may be pruned, also raspberry, gooseberry, and currant trees. Turf may be re-laid, and, if necessary, grass-seed sown; the grass should be rolled after wet weather.

Pay attention to bulbs now; crocuses and snowdrops should be starting. As soon as tulips, hyacinths, and other bulbs show their foliage, they should be protected at night by a light covering, until the frosts are over.

In February, annuals may be sown indoors in boxes, and gradually hardened off for the garden, where everything should now be made tidy and ready for the spring, which will soon be coming.

In the warmer counties of England the wild daffodil will soon be flowering. The old-fashioned "daffy-down-dilly," though only of late years fashionable in town drawing-rooms, has always been a favourite with poets and artists, and all true lovers of the country. Wordsworth gives a beautiful description of "a host of golden daffodils."

"Ten thousand saw I at a glance,
Tossing their heads in sprightly dance."

And who does not remember Herrick's quaint but beautiful verses, beginning:

"Fair daffodils, we weep to see
You haste away so soon."

Or Spenser's equally charming description of Cymoent with her companions playing by a pond, and

"Gathering sweete daffadillyes, to have made
Gay girlonds from the sun their forheads
fayr to shade."

The name sometimes given them of "Lent Lilies" is peculiar to places where they flower; in colder countries, where it would have no significance, the name is unknown.

Like every other growing thing, the daffodil has much about it worthy of notice. It deals in sixes; six lobes to the corolla, and six pollen stamens, but a three-lobed ovary, and only one seed-leaf.

The wild daffodil has little scent, but being, like the majority of spring flowers, of a bright yellow colour, it is easily seen by the day-flying insects, on whose visits it depends for fertilisation, while some of its near relatives, which are chiefly visited by night moths, are white and strongly scented, in order to be conspicuous even in the darkness.

At this time of year, when the more hardy birds are beginning to return to our shores, as well as in autumn when they are migrating, a great number of our songsters are killed annually by flying against telegraph wires.

Those that fly by night are the most frequent victims, but besides these many either fly or are blown against the wires, and killed or injured so severely that they die before long.

ANSWERS TO CORRESPONDENTS.

EDUCATIONAL.

MELISSA MATHESON.—The Braille System is the invention of M. Louis Braille, who was a blind professor at one of the national French institutions for the blind in Paris. The work of copying the cut-books is done by ladies, and the blind copy the embossed copy five times at least. You can obtain full particulars on applying to the secretary, British and Foreign Blind Association, 33, Cambridge-square, Hyde Park, London, W.

A LOVER OF HISTORY.—Sir William Wallace was defeated at Falkirk, July, 1298, by Edward I., brought to London, and hanged at Smithfield, 24th August, 1305, seven years afterwards. His public life extends over a period of fifteen months, and as to the history of his private life, there is an absolute blank. The whole of the fables about Sir William Wallace are the product of Blind Harry's imagination.

A MARTINITE.—You do not mention where you live, so our help will not be as effectual as it might be. You would obtain evening classes at the Birkbeck Institution, Bream's-buildings, Chancery-lane, E.C., in all the branches you name. Subscriptions, 4s. quarterly, 12s. annually.

S. A. U.—We should think you fully capable of taking a situation as governess with your certificates, which say so much for your general education, as well as attainments in music. Your handwriting is certainly not good, and looks uncultured. The only way you can improve it is to take some pretty handwriting and form yours on it.

M. B. B.—You should write to the secretary of the College of Preceptors, 42, Queen-square, Bloomsbury, W.C., for their prospectus, and all information for the current year or coming term. It holds half-yearly pupils' examinations, the certificates given being recognised as guarantees of a good and general education. The fee is 10s.

ART.

MERMAID.—Seaweed taken from rocks should be placed in a basin of cold fresh water to spread itself out, and removed from thence on to a sheet of blotting-paper by sliding a card under it. See directions already given, and the article on how to preserve seaweed.

MEMORY.—The price mentioned in the article upon crystalloids for finished pictures was obtainable when the work was new, at which time the paper was written. Five years have elapsed since that time, and many people have learnt the art, so that the price it could fetch at first is no longer given, unless the work be very superior and the subject of large dimensions.

MARY.—Fan painting is decidedly remunerative, and has the advantage of being home-work; but a certain amount of originality is essential for it, as well as practical skill and experience and very great neatness.

were only cooked the usual time, and were greatly relished by the younger members of the family.

I would recommend the use of Easter eggs to those girls who take Sunday-school classes; they are very good mediums for giving precepts or words of advice; a judiciously chosen motto or text may often do a great deal in helping a child or person to correct a fault, and a motto is more attractive on an ornamental egg than in a book.

I remember a little German book called "Ostereier" (Easter eggs), in which a charming account is given of an Easter festival, when motto eggs were distributed to a number of children. Some of the rhymes given are very pretty; they lose in translation, but are such as "Goodness, not gold, wins love and trust," "For meat and drink the giver thank," "A good conscience makes a soft pillow."

Such sentences as these do for quite small children, but a short verse from a hymn or a text can easily be written on an egg. They look very well coloured pale blue or mottled green and blue, as directed above, and the words written on after with red, or blue ink of a darker colour, and a little ornamentation round. For school-children water colours should not be used in painting the eggs, for the warm and often moist hands

of the recipients of these little gifts would smear the paint.

We must now come to another kind of egg I have found much appreciated, as it is eatable, though imitation only. It is prepared thus: Procure some half egg shells which you can colour or not, as you please, but you must cut the edges as smooth as you can with a pair of small, sharp scissors; next take one pound of ground almonds (they can be bought ready prepared), mix with the beaten whites of three, or if small, four eggs, add a teaspoonful of orange flower water, or a little more, if needed, make into a paste, and stir in one pound of fine sifted loaf sugar, and work with a wooden spoon into a smooth paste; next shake a little icing sugar into the half shells, and fill them with the almond paste, scoop a piece out of the centre of each half, and as you put the two halves together insert a preserved apricot (dried) without a stone; if the apricots are too large use half ones, but whether large or small they must be pressed into suitable shapes before they are used, as they have to represent the yolks of the eggs.

When the parts are joined together, a strip of tissue paper should be fastened round the junction with white of egg, and then a ribbon or ornamental paper put round and the shells decorated with a little water colour paint. If preferred, the shells can be used as moulds

only, and removed as soon as the paste is dry, but if this is to be done the two edges of the almond paste must be *moistened with white of egg* before they are put together, or they would come apart when the shells were removed.

The almond eggs must be put in a warm, dry place as soon as made; a very cool oven will do to dry them.

If you remove the shells, cover the almond paste with icing sugar that has been well worked with a little white of egg and lemon juice; this is not an easy operation, but if the sugar is well worked before using, it will cover the paste more neatly than if used quickly; if sufficient smoothness is attained the sugar can be decorated afterwards with some harmless colouring, such as saffron or cochineal.

To make sugar eggs, mix one ounce of raw arrowroot with one pound of icing sugar, add the beaten whites of three or four eggs, according to size, and a teaspoonful of lemon juice; work the mixture well; use the egg shells as moulds and proceed as with almond paste, putting anything that is liked in the centre, and joining the halves together with white of egg; dry thoroughly, in some place not warm enough to melt the sugar, before you remove the shells. It is easier to take the halves off if they are slightly oiled before the sugar is sifted into them.

NOTES FOR APRIL.

It is very interesting in the spring to watch the gradual development of a frog from the egg, through the tadpole stage of its existence, till at last it assumes its final form.

The old frogs emerge from their winter hiding places in the mud, early in the spring, and during March their eggs may be found floating on almost every stagnant pond. A group of these eggs in their early stages of development looks like a mass of clear white jelly, containing numbers of black specks, each of which is really the germ of the future tadpole.

In order to watch the development, a group of the eggs should be taken and put in a shallow vessel of water, which, if kept in the house, should have a bell-glass, or some other covering over it, to keep out the dust.

The jelly-like mass which envelopes the future tadpole is so clear that all its changes can be easily watched. First the head appears, then a flat tail, and in course of time the nostrils, mouth, and large eyes, till at length the completed tadpole bursts open its gelatinous covering, and apparently not in the least embarrassed by its new surroundings, begins swimming briskly about, looking for something to eat. The time occupied in hatching varies in different countries, according to the climate, from four days to a month. In England the tadpole does not often appear till towards the end of April.

The following stages are even more interesting, especially for those who can take advantage of the transparency of the parts to watch the circulation of the blood through a microscope.

The body of the tadpole gradually gets broader, while the tail gets thinner and thinner, till it finally disappears altogether; but before that happens its place has been taken by two hind legs, which first appear under the skin and then gradually push their way through. The fore legs next appear, and so on through all the stages of development, till in a longer or shorter time, according to the amount of warmth, light, and food it can obtain, the complete frog appears.

But woe betide the unfortunate tadpole

which, first of the shoal, attains to the dignity of possessing limbs, for so ferocious are the later ones, and so jealous of their precocious little brother, that they almost always fall upon him, and, not content with killing, never rest till every morsel of him is eaten. And unless several of the tadpoles assume their final change about the same time, this proceeding is repeated till their numbers are very considerably diminished, or, as sometimes happens, till only one survivor is left, who, having helped to eat all his brethren, instead of meeting with his deserts, is allowed to live on in peace, till some day in the course of his walks abroad, he, in his turn, is snapped up as a delicate morsel by some hungry snake or waterfowl.

Insects and flowers are much more closely connected with one another than we sometimes think.

Not only do many insects depend upon flowers for their food, but many flowers also depend upon the visits of insects to carry their pollen from one flower to another and so continue the life of their species.

There are some flowers, however, whose pollen is carried by the wind instead of by insects, and which are therefore an exception to this general rule. These, not needing to attract insects, are small and insignificant, with neither scent nor honey, but with a very large quantity of pollen. They generally flower early in spring, before the leaves are out, as these would catch the pollen as it is blown along by the wind, and prevent it reaching the flowers for which it is intended. Notice, for example, the flower of the oak, elm, ash, and Scotch fir.

April is a busy month in the garden. Auriculas and polyanthus in bloom should be watered often, and shaded if the sun is very bright, and sheltered when the weather is cold; tulips also must be sheltered from severe cold, though they may safely be encouraged to grow now.

Seeds of perennials and biennials for flowering next year should be sown now, such as wallflowers, carnations, and pinks. Heartsease for autumn flowering should also be sown, and

cuttings taken from old plants. Hardy annuals should be sown not later than the middle of April. Give them good soil, and do not cover the seeds too deeply with earth (some of the smallest kinds should only be sprinkled on the top), and when they begin to shoot up thin out the young plants vigorously; amateur gardeners almost always leave them too close together, but the more room they have the better and stronger they will grow.

If there is no greenhouse, or "heat," half hardy annuals may be sown out in the open garden towards the end of April, and if diligently cared for they will grow well and thrive.

After a warm day, evergreens are benefited by syringing. Ivy that is wished to grow close should be clipped all over; and grass should be cut about once a week, and often rolled. It should not be allowed to get long before cutting the first time, or it will be troublesome to get into order again.

April is the month in which we welcome most of our spring bird visitors. The nightingale and cuckoo have already come and begun their song; the swallow and house-martin will arrive about the middle of the month, and are soon busy making new nests, or patching up old ones. The whitethroat appears towards the end of the month.

During the April showers the whole air seems full of song. Walking through woods ringing with bird music, we are once more reminded of the problem which so puzzled Daines Barrington. "Do the birds all sing in one key? And if not, why do the songs harmonise instead of producing unpleasant discords?" Perhaps it is the distance which lends enchantment and softens the discords. No doubt if all the songsters were in one room, the result would not be quite so happy.

Many eggs, larvæ and cocoons of butterflies and moths may be found this month among heaps of dry leaves, on low bushes, or trunks of trees. Grasses and rushes shelter several of the early species, which are already flying about, and some rare insects may be found now which cannot be obtained later in the season.

Mr. Randolph did not notice the disappointment in Mabel's tone. He, too, had been forming plans during the day, but to carry them out would require that all Mabel's money should be spent in the household, leaving a very small portion at her own disposal.

Mrs. Randolph had feared something of this kind would be proposed by her husband, and therefore she could not encourage Mabel very much in her noble ideal until she had heard her husband's views upon the matter.

When she knew he had spoken to Mabel, she said, "You have heard, of course, what she wishes to do with this money?"

"I have told her what I wish, and of course she is agreeable, for she can have no use for such a sum of money."

"Did she not tell you she wished to go to Girton, and afterwards study medicine?"

Mr. Randolph opened his eyes in the greatest amazement.

"Go to Girton and study medicine?"

What ridiculous nonsense! Why, she is provided for now; what more does she want!"

"The being provided with food and raiment for life is not sufficient for a girl like Mabel," said Mrs. Randolph, warmly; "she is anxious that her life should be a useful one, and ever since she was a little girl, you know, she has talked of being a missionary."

"Oh, yes, I know," said the gentleman, testily, "but she will have to learn that charity begins at home, and surely she can make her life useful by helping you with the children."

Mrs. Randolph sighed, but she knew that no good would be accomplished by saying any more to her husband, and in a few minutes she left the room, and went in search of Mabel.

"My dear, I am very sorry," she began, seating herself on the little couch beside her daughter, and drawing her head down upon her shoulder.

"Oh, mamma, I am so disappointed," exclaimed Mabel, bursting into tears

afresh, as her mother tenderly stroked her hair, and drew her close to her side.

"Yes, dear, it is very hard, I know; but, my love, I do not think you will be asked to give up your plan of usefulness altogether. A year will not make much difference, and if papa can have this money of yours for a year, and we live economically——"

"But, mamma, I hate living economically," protested Mabel; "it makes everything uncomfortable, and I had made up my mind that now this money had come, there would be no need for it."

"But, my dear, there will always be a need for it, though I cannot see that it must make us uncomfortable," said her mother.

"But it does, and nothing can prevent it," pouted Mabel. "Of course, papa must have the money, and I must wait for a year," she added, and with this very ungracious assent to relieve the home pressure, Mabel turned away and wiped her eyes.

(To be continued.)

NOTES FOR MAY.



ALL through the showery and uncertain weather of April we have comforted ourselves with the thought (or we ought to have done so, if we remembered the rhymes we were taught in the nursery) that "April showers bring May flowers;" and although this reflection may not have altogether compensated us for getting our new spring bonnets spoiled by unexpected showers, it is cheering, now that May is really here, to find

that it is indeed a very flowery month. She "comes in like a spendthrift, lavishing flowers on every hand." Horse-chestnut, apple and pear trees, mountain ash and acacia, lilac and laburnum, are all in full bloom; the lime trees are beginning to scent the air with the fragrance of their blossoms, while even the hawthorn, which in many counties is actually called by the name of the month, though not always willing to adapt itself to new fashions so far as to be in full bloom by our modern May Day, generally manages to be up to time for the old date of the festival, eight days later than our present one.

The subject of plant names is a very wide and very interesting one, connected as it is with folk-lore, the old healing art, and old customs generally. In days gone by, the different plants were not so clearly distinguished as is the case now; the one mentioned above, for instance—hawthorn—was to our forefathers simply the tree that bloomed in May, and was therefore called by that name.

In the same way a plant was often called by the same name as some other to which it had a real or fancied resemblance, with the name of some animal (chiefly "horse" or "dog") prefixed, to distinguish it. These prefixes were especially used where the plant to be named had a larger, stronger growth than the original, or was in some way inferior to it. Thus the "horse-radish" has some resemblance, in the appearance of its edible part, to the long small radish, but the taste is of

course much stronger and more pungent. It is a rather disputed point how the "horse-chestnut" came by its name; whether it belongs to this class, as being stronger in growth than the sweet chestnut, its nuts resembling the edible ones in appearance, but not being good for food, or whether its name was derived from the scar left by each leaf as it falls, which has seven black marks like the nails of a horse-shoe. In this case it would belong to the class of plants taking their names from a fancied, and sometimes far-fetched, resemblance to something in the animal world. In this class we have the cranesbill, the horsetail (sometimes called mare's tail), the coltsfoot, the hare's-foot fern, and many others.

The prefix "dog" seems rather to point to inferiority of some sort. Thus, "dog-violet" is the larger, lighter-coloured, but scentless violet. The "dog-rose" is the sweet, wild rose, which is considered (by gardeners at any rate) as inferior in form to the cultivated kinds. This inferiority does not, however, apply to the dog-daisy (otherwise Marguerite, moon-daisy, or ox-eye daisy), for this flower seems to have lost nothing by its larger, stronger growth.

May is a month of activity in the animal as well as in the vegetable world. Readers of Charles Kingsley's "Water Babies" will remember his delightful description of the caddis-worms; and now is the time to find them building their castles under the water. Girls who have an aquarium may add some extremely interesting objects to their collection now, if they go out with their nets to the streams and ponds, and catch a few of the larvæ of the dragon-fly and the short-lived May-fly; they will find them both busily at work, chiefly engaged in chasing and eating aquatic worms and insects, till the time approaches for them to change their state, when they crawl up some plant to the air, and remain there motionless till they are at last ready to emerge.

Young birds are now about too, learning to fly or run. When the plumage of the cock and hen bird is alike, the young frequently have a distinct plumage of their own, as is the case, for instance, with swans and seagulls.

When the cock and hen are different in appearance, the young resemble the mother in their first feathers, the young cocks only acquiring their distinctive plumage later on.

Birds that fly much, such as swallows, blackbirds, and thrushes, have their wing feathers developed early; while those that run chiefly, such as partridges and fowls, gain strength first in their legs and thighs.

Young animals, the first part of whose life is spent in a nest, are blind and weak-limbed for some time. If they had their sight and could run at once, they would be in danger of straying from the nest and getting injured, while the parents were away seeking food. Cats, dogs, and mice are instances of this.

On the other hand, those that usually enter the world singly, and are expected to run about with the mother at once, have their sight at once, and their legs are long and thick, looking out of all proportion to their small bodies. A very young lamb, or calf, or foal is anything but a graceful object, but it can run fast and keep by its mother's side at an age when a puppy or kitten can do nothing but sprawl about helplessly.

Ten-weeks stock should be sown at the end of April, or the beginning of May, according to the weather. The seeds sprout in about twelve days, and should then be thinned vigorously, so as to give each young plant room to grow.

Night-scented stock should also be grown now; it needs very little attention beyond thinning when the seeds have sprouted. In the daytime it is neither very pretty nor sweet-scented, but when evening comes on its flowers open, and its sweet fragrance fills the air.

Many plants started in the house should be put out now, but must be guarded against the cold nights we may still expect. Among these are dahlias, hollyhocks, antirrhinum, and dianthus. Girls who have no means of starting plants in heat, may judiciously expend a few pence at the nearest florist's; he will be able to advise as to which plants will suit the local soil.

Beware of slugs and snails; and lay traps of cabbage leaves, and rings of soot or sawdust, about the young plants, or they will hardly have a chance for their lives.

ance, as each concave surface of the apricot is surmounted with a little ruby-coloured centre, set in emeralds. Peaches, of course, can be treated in exactly the same manner.

Apricots are very useful in ornamenting what we may call high-class sweets. For instance, take an ordinary pie-dish, and some slices of stale brioche cake or plain bread, and butter the cake or bread with apricot jam, and soak the cake or bread in the juice of the tinned apricots. A little brandy added to the juice is a very great improvement. Now place these slices of bread and jam in a pie-dish, and fill the dish up with a custard made from three good-sized eggs, or four small ones and half a pint of milk. Bake the pudding in the oven. When it is quite set, take it out and let it get cold, and then turn it out on to a dish—a glass dish or silver dish. It turns out very easily, as you can cut the pie-dish round the edge with a very thin knife. Although this is a very nice dish, it is by no means artistic in appearance. Next take a little jelly—orange or lemon; and as jelly can now be obtained in half-pint bottles at ninepence, or in quart bottles for two shillings, in the case of having a few friends to a dinner or supper-party the expense will not be very great. Dissolve a little jelly in a cup, and when it is cold, but not set, pour the jelly gradually and gently over the pudding, which is placed, of course, with the small end uppermost, so that the jelly quickly sets over the pudding. Use a spoon for this purpose, and take care the pudding is very cold. By this means the pudding is covered with a coating of clear jelly. You can, however, surround the pudding with a coat of what looks like custard by simply adding a dessert-spoonful of Swiss milk to the jelly in a teacup before it is cold. Now place a row of apricots round the pudding on the top, and on the top of each apricot place a preserved cherry and four little leaves of angelica, as we have described; or, if the apricots are very ripe, you can put a row of the apricots round the edge of the top of the pudding, and place a cherry and a strip of angelica between each apricot.

You can also make an apricot, with a cherry on the top and green strips stuck in it, a centre ornament on the top of a pudding. Scrape off all the jelly, or jelly mixed with Swiss milk that has run off the pudding into the dish, and wipe the dish round with a hot cloth. Some more apricots can now be placed round the edge, or the remains of the jelly and milk, or jelly by itself, can be made quite red with a small quantity of cochineal, and poured round the base of the dish. This has a very pretty appearance, more especially if the pudding itself be white. I only mention mixing the Swiss milk with the jelly as a

makeshift, because, of course, a little solid custard made separate would be better; but when we have a bottle of jelly open, as is probable in the case of a dinner party, or in preparation for a supper, it saves a great deal of trouble to use the jelly in the way we have described.

Preserved pears are, I think, best served just as they are—plain. A great improvement, however, in their appearance is to strain off the juice, place it in a saucepan, and let it boil, and dissolve in it a little gelatine, and add to it enough cochineal to make it a bright red. The gelatine should be added in sufficient quantity to make the sauce thick when it is cold, but not quite a jelly. When the sauce is very nearly cold, it should be poured over the pears slowly. By this means the pears are covered red, and have the appearance of being encased in a pretty red jelly. This dish should be ornamented with some kind of green, as the cherries will not contrast with the red juice. The green should be alternated with some white almonds. The almonds should be blanched and cut in half.

Another very pretty dish can be made out of preserved apricots or peaches by piling them up in a rice border. Rice borders are made by boiling rice tender in milk; Swiss milk can be added, in which case no sugar will be required, and the rice border can be flavoured with vanilla, cinnamon, lemon, or essence of almonds. When you flavour the rice with lemon, you must never use essence of lemon, as it is apt to taste like turpentine, more especially if you put a few drops in an apple pie; but the flavour of the lemon should be obtained by rubbing lumps of sugar on the lemon rind. A dozen lumps of sugar rubbed on all six sides on the outside of a lemon will obtain a very strong lemon flavour indeed. A very good method of making a rice border can be obtained by placing a small cake-tin in a large cake-tin, and filling the space between the two with the rice. Sufficient eggs must be mixed with the rice to set it when baked in the oven. The tins also should be buttered in the parts where the rice meets them. After baking the rice in the oven, you can take off the two tins, and you will have a circle of rice quite firm. This rice circle can now be filled in the middle with any kind of fruit you like. The apricots should be put in the centre, and piled up in a pyramid form. The top of the rice border makes a wall, on which can be placed a variety of different ornaments. I would suggest instead, in addition to the apricots themselves, ornamented with cherries and angelica, to use various kinds of crystallised fruits. For instance, crystallised green-gages and crystallised apricots, placed alternately, would have a very pretty effect, espe-

cially if we made a border of red cherries, placed on each side of the fruit where the fruit meets the rice.

If you ever have a few spare apricots left over from a dish after you are making a fruit pie, and have a little piece of pastry left, roll the pastry out as thin as you possibly can—say as thin as a sixpence—and line a few little buttered tartlet tins with it. Place half an apricot in the middle of each tin, after having partially baked the pastry in the oven, and in the centre of each apricot place a preserved cherry. Cut a few thin slices of pastry, no thicker than a piece of string, and place over the top, and bake in a sharp oven for a few minutes till the pastry is set; but do not bake it too long, as in that case *the fruit will dry up and spoil*. A little apricot jam should be placed over the piece of the half-baked pastry, if you have any, the apricot on the jam, and the cherry on the apricot.

Then a nice little dish can often be made from the odds and ends of a few things that have been left over from the previous day's dinner, and which otherwise would probably have been wasted.

It is of these little acts of carefulness that true economy may be said to exist. There is a good old saying, "Waste not, want not." A good housekeeper is always looking out for trifling acts of saving—taking care of kitchen pence, thereby saving kitchen pounds. The preservation of food in tins enables us not only to obtain the produce of distant countries fresh in our own, but also to carry out the wise forethought of making years of plenty protect us in after years of famine.

I would, therefore, before bringing these remarks on tinned goods to a close, ask you to regard the subject from a higher point of view than one of mere gratification of the appetite. Meat in Australia was once thrown away. Now it is either tinned or frozen and eaten, in addition to the wool and tallow being used.

It has been well said that the greatest benefactors of the human race are those who help most to increase the food supply of the world at large. It is a hard struggle with many of our poor in the present day to obtain even the common necessities of life.

In this great and mighty city each morning, day after day, the cry goes up to heaven from thousands of households, "Give us this day our daily bread," not knowing if the prayer will be answered. Let us hope one and all that our faith may never be put to such a test, but we should still remember the good old maxim which ought to apply to us not only individually but as a nation—"God helps those that help themselves."

[THE END.]

NOTES FOR JUNE.



"leafy June" the foliage in our woods and parks is seen at its very best; the leaves are fully out, but not yet scorched and dusty. Now is the time for noticing the way in which the leaves are set on the stalks, and the angle at which the stalks start from the branches.

Is there any method in the way the leaves are arranged on the trees?

The question opens the way to hours of study indoors, as well as out of doors among the trees themselves; a study that would benefit alike our "girls'" minds and bodies. Sir John Lubbock gives a hint which we can follow up, when he says: "Our English trees

may be said, as a general rule, to be glad of as much sunshine as they can get." In some tropical plants the object, on the contrary, is to "expose as little surface as possible to the overpowering sun;" and their leaves are wonderfully adapted to this end.

It would be interesting to try with a given number of leaves and stems, if we could arrange the foliage better than it already is.

"Whoso is wise, and will observe these things, even they shall understand the loving-kindness of the Lord."

In the garden there is plenty to do this month. Some seeds may yet be sown, if there is any room left. Amongst those which may still be planted is the old-fashioned hollyhock. It should be sown in light, rich soil at the

beginning of June; the plants must not be allowed to grow too near together; and they must be carefully staked, and the side shoots taken off as soon as they begin to grow tall. If the soil is light, they can safely be left out all winter. Wallflowers, too, may be sown now for next year's flowering.

Bedding-out plants are arranged in the garden now, and need well watering in dry weather. Much of the seed sown last month, mignonette especially, will need a good deal of thinning out.

Window and greenhouse plants must be watched for green-fly, and the infested plants washed and syringed frequently.

The grass must be constantly mown and rolled, and if the weather is dry a thorough watering once or twice a week improves it.

Crabs can be caught on our English coasts all the year round; but they pass through the most interesting stages of their history in the early summer, and this is consequently the best time for observing them.

The mother crab carries its eggs under its tail, which is folded closely under the body. They are hatched in May or June. The young ones are so unlike their parents that, when first noticed, naturalists thought they had discovered a fresh creature altogether, and gave it a distinct name, till, to their surprise, after watching it for a time, the new discovery developed itself into an ordinary crab. It is shaped at first like a dome, with a peak at the top, two portentously large goggle eyes in front, and a long, flat tail behind. It is very

independent, and swims away on its own account directly it is hatched. After going through various transformations it takes on its final form. For the rest of its life it moults in the early part of each summer. Its cast-off shell is wonderfully perfect, eyes, and even small hairs, being found on them quite intact.

Would-be collectors will find the shells of British molluscs an interesting field to begin upon, and less common than many others. Land molluscs are more numerous in the south and south-east of England than in the other parts of the islands. There are only a few varieties peculiar to the British Isles; but strangers sometimes find their way here, and become naturalised. For instance, among the

chalk hills of Surrey is found the large edible "Roman" snail, as it is there called. It is said to have been introduced by someone suffering from consumption, who wanted a supply for his own eating, and it has since thriven and spread.

Some kind of net is necessary for collecting freshwater molluscs. The easiest way of extracting the occupant from the shell is to drop it into boiling water, which kills it instantly.

Girls who live near the sea can collect an almost endless variety of salt-water molluscs; some very beautiful, and some very minute forms of molluscan life can be found amongst the fine dry sand above high-water mark on a sandy beach, or the same and other varieties, still living, on the clumps of wet seaweed.



SUCH A COWARD!

CHAPTER II.

SILENCED, BUT NOT CONVINCED.



CHILDREN, children, do stop! What an awful noise you're making!" cried Juliet, dropping her paint brush in horror, and stopping her ears. "Céline, whatever is the matter? and Alf and Janet, what have you been doing to her? Stop crying, Emmie dear; no one is hurting you."

"It was only a joke," Alf answered, speaking as well as he could for laughing. "I didn't do anything but just drop Pinto on her knee, when she set up that awful yell and flew as if her last moment had come. Oh, Frenchy, you'll kill me yet! I never saw such a face; and all for a poor, harmless little dog that wouldn't hurt a fly." And he broke out into another inextinguishable peal of laughter.

"Oh, you donkey!" chimed in Janet, still hopping about in malicious glee. "To be frightened of a poor, harmless little dog! Oh, what a donkey you are! And didn't Alf and I do right when we said you were silly by name and silly by nature? Before I'd be such a fearful coward, I'd—I don't know what I wouldn't do."

"Oh, do be quiet, Janet," cried Juliet again, despairingly. "I can't make out whatever is the matter. 'Oh, here's mother! now she'll make you be quiet.'"

And indeed Mrs. Marston at this moment opportunely entered the room.

She looked round in surprise, wondering, like Juliet, what was the matter, for Janet was whirling wildly round; Emmie was sobbing, she knew not why, over her doll; Alf was hugging Pinto in his arms and laughing incessantly; while with a white, terrified face, and her hands pressed tightly over her heart, poor Céline was crouching behind the big easy chair in silence.

"You may well ask what the matter is, Julie," Mrs. Marston said, rather severely, after pausing for a moment to survey the group of young people. "Alf, what is up? What have you been doing?" for she knew from long experience that in such a case Alf or Janet was sure to be the culprit.

"Have you been teasing Céline or Emmie, or what have you been doing?" She lifted Emmie in her arms as she spoke, and sat down in the easy chair by Céline, putting her arm round the silent girl with a caressing, protecting gesture, repeating gently, "What is the matter, my dear?"

"It's nothing, mother," Alf broke in rather defiantly. "At least, nothing in the world to make such a fuss over. I only did it for a bit of fun. I just put Pinto on her knee, and she sprang up with a terrific yell, and threw the poor little doggie down and ran away to hide. It was such fun to see her run, and there was no harm in it; Pinto wouldn't hurt a fly, and she shouldn't be such a donkey as to be afraid of him."

"You shouldn't have done so, Alf," his mother answered, sternly. "You know I have forbidden you again and again to play such tricks upon your cousin with your dog or any other dog, and you disobey me again and again."

"I quite forgot, mother; I'm very sorry I forgot you'd told me. But why should she be so frightened of a harmless little dog like Pinto? Céline's such an awful coward."

"Hush, my dear, you are not to say such things about your cousin; it is rude and ungentlemanly. Now beg Céline's pardon for your cruel trick. Don't be frightened, dear," she went on, addressing the trembling girl by her side. "Alf will not let his dog touch you again. I am so very sorry he should have given you such needless fear."

"I'm all right now, auntie, thank you," Céline answered, her voice breaking into a little hysterical sob. "I know I am an awful coward to be frightened of such a little thing, but it took me unawares, and I couldn't help screaming. Oh, I wish I was not frightened, but I can't help it." Her heart was even yet beating so wildly she could hardly speak.

Mrs. Marston turned to her son reproachfully. "Alfie, you will make your cousin really ill if you play such thoughtless tricks upon her. I will not have it. Tell her how sorry you are for having frightened her. Remember she is not so strong as you are."

"I'm sorry if I've hurt you, Céline," he answered, rather graciously; "but it seems so absurd to be frightened of a dog like Pinto. If it had been a big bulldog I could understand it better, but Pinto—"

"I know it seems awfully cowardly,"

Céline answered, penitently, "but I do try, auntie; I don't think Alfie knows how hard I try to get over my fear. And I really have been better lately, haven't I, Julie? I played a little with Pinto the other day and was not very nervous, only I haven't felt quite up to the mark the last few days, and I suppose that makes me more nervous, and you know, Alfie, you did come upon me very suddenly. I seem as if I cannot get over my horror of dogs ever since that time I was attacked by that fierce one in our orchard when I was quite a little child. See, I've got the mark still where he tore my arm," rolling back the sleeve of her dress and showing a white scar below the elbow. "I was very ill for a long time after, and I've been terrified of dogs ever since."

"And I could understand your being frightened of some dogs," answered Alf, incredulously, "but not a little thing like mine; it's too ridiculous."

"My dear boy," said his mother, "because you have iron nerves you must not forget that other people have not the same, and though you may not be able to enter into all their feelings, you might take them on trust. It is often quite as much a question of nerves as of real bravery. I once had a friend, a very clever, intellectual woman, not one bit a coward, and yet she never could bear to have a cat in the room where she was, and she could always tell if even a kitten were there. If she did not see it she knew it was there. She tried hard to overcome the weakness, for, as I said, she was no coward, but she never could."

"Well, it seems uncommonly like being a coward to me," said Alf, loftily, "and I must say I should be ashamed if I were as weak over anything; and until Céline gets over being afraid of a harmless dog, I shall always think she's a coward. I can't help it."

"And yet I don't think I'm a great coward, auntie dear, over anything else," put in Céline, pleadingly. "I think I could be brave other ways if I had to. Why, only yesterday Julie cried out because she found a cockroach on her dress, and three days since Janet screamed when a mouse ran across the room."

"That was only for fun," said Janet, unabashed. "I was not really one bit frightened, though I know Julie is in mortal terror of a cockroach. I don't think either Alf or me knows what fear is," she went on, complacently.

a little longer in Salzburg, till you hear further."

With the pebble enclosed, she dropped this from the window. Instantly a form stole from the shadow of the trees below the terrace, picked up the letter, and sped away. It was the work of a few moments. Poor Stern had learnt to be swift, dexterous, noiseless, and alert by his past experience.

Then Elsa was left to reflect on her rash promise. What had she done? Surely escape was impossible. Yet it had seemed borne in upon her that she could not let Rudolf go without an attempt to meet him, and ascertain from his own lips whether she should be his companion in the wanderings to which the foolish children looked forward so confidently.

Elsa's eye fell upon the ivy that, strong with the growth of uncounted years, climbed up the castle wall, and framed her window in a leafy setting. A recent storm had loosened its hold

here and there, and the giant arms clung with varying tightness of embrace to the stone. Surely there were places where a foot might be set and the clumps that projected might offer something for the hands to hold! Yes; here was a ladder ready to her use, and Elsa's active brain thought out the plan. She would prepare a bundle of necessary clothing, with the few trinkets she inherited from her mother, throw this out first, then, by the help of an impromptu balustrade, formed of a sheet knotted in strips, and securely attached to a heavy bedpost within the room, she would descend the ivy stair at dusk on the following evening, and trust to reaching Salzburg in safety.

It was a rash, impetuous proceeding; but Elsa's whole being was possessed by one thought. She must see Rudolf again. Separation from him, her one companion, her mother's sacred charge, with never a word to break the silence, and with the long distance between

Salzburg and Vienna (then unspanned by railroad, as it is now) to divide them, she could not endure. Therefore she must escape.

The intervening hours passed with lagging steps away, and when twilight came on the following evening, Elsa threw out her little bundle and began the descent.

With the help of the knotted sheet it was easier than she had feared. In the great rambling castle no one was near, nor were any eyes peering out into the gathering darkness to note the strange figure clinging and scrambling downwards, and scaring the birds from the ivy.

Her feet touched the ground; she was free! Catching up her bundle, she darted swiftly away into the forest below the castle, and was gone, the white rope by which she had descended waving idly in the night air.

(To be continued.)



NOTES FOR JULY.



SPIDER generally seems to have the same effect upon our girls as the one famed in history had on "Little Miss Muffet"; but if girls could

overcome their dislike, they would find very much of interest in the "long-legged spinners," and much that they could observe for themselves without being

driven to study indoors. Spiders are almost the only carnivorous insects which depend upon artifice and stratagem for the means of catching their prey, and it is their cunning tricks and clever devices which are so entertaining to study.

There are about 100 species in England, but they have been divided into five main varieties—the hunting, wandering, prowling, sedentary, and water spiders. These all have slightly different ways of catching their prey, and their webs are differently arranged; but all alike produce their silk from four spinnerets, at the hinder part of the body. Each thread, before leaving the spinneret, is already composed of numberless microscopic lines twisted together, so that each completed thread in the web is in reality formed of about 4,000 lines. These four chief threads remain disunited to a sufficient distance from the body (about one-tenth of an inch) to enable the observer to see them each separately.

The web itself is made of many different shapes, by the different classes of spiders, according to the particular purpose they have

in view. The ordinary garden spider fixes a number of strong threads in straight lines radiating from the centre, and afterwards unites them by circular threads; these latter are covered with tiny globules of viscid gum, which first catch the unwary fly.

A naturalist, M. D'Isgonval, says that spiders' webs may safely be depended upon as accurate barometers, for if the weather is going to be stormy, the main threads will be short and near together; whereas if they are very long, we may know that the spider's unerring instinct foresees fine settled weather.

Spiders can be kept in captivity, for the purpose of watching their habits; but there are two drawbacks to making pets of them—their large appetites and their quarrelsomeness. They have been tamed successfully sometimes; it is related, for instance, of a prisoner in the Bastille, M. Pelisson, that he had a spider which knew him so well that it would come out to be fed when he whistled for it.

Those who wish to take up the study should note where and how the web of each spider is spun, what kind of nest the mother makes, how the eggs are deposited, and whether the spider runs, leaps, or crouches when frightened, as well as its colour, marking, and size.

The eggs are laid in June and July, and the mother watches over them most carefully. Spiders do not go through a metamorphosis, but they moult several times, and during this operation they renew any limb that has been broken off.

There is a curious belief in some parts of England that no one over 60 years of age can hear the song of the grasshopper. Though this is untrue, there are some people who seem to have a strange inability to hear it; the air may be full of the curious zic-zic sound to one of the party, while another may not be able to detect a note of the whirring song.

Though shrill, and anything but musical, the chirping of the grasshopper and its kindred (crickets, locusts, and so on) has always been much admired; the Greeks used to think so highly of their love-song that they kept the little insects in cages, as we do canaries. Their praises are sung by many of the Grecian poets; Homer, Hesiod, Anacreon, and many others addressed them by the most endearing epithets.

The sound is produced in slightly different ways by the various species, but the principle is always the same as that on which our common English grasshopper makes its sound, namely, by rubbing together its long, half-horny, outer wings. The male only sings, the female appears too busy laying her eggs, and depositing them in a hole in the ground which she has dug with a sharp, sword-like instrument projecting from the under part of the body. The grasshoppers appear in July, and are to be seen till the cold weather begins, but the eggs do not hatch till the following spring; and the insect which first appears, though much the shape of a perfect grasshopper, has no wings, and it is only after five or six moultings of its outer skin that it is perfectly developed.

There is not much to do in small gardens this month; we should now be reaping the fruits (or rather flowers) of our earlier industry, but we find plenty of occupation in keeping the garden tidy, well watered, and well weeded. Hedges must be kept clipped too, and the grass rolled and cut; and annuals that have done flowering must be rooted up. The later annuals probably still need thinning, and many plants will want staking, and traps must be set for earwigs among the dahlias. Budding may be done this month, but a cool cloudy day must be chosen for it. Some perennials may be sown in boxes or shaded places for next year's flowering; amongst these are the polyanthus, which does not need a very rich soil, forget-me-not, calceolaria and mimulus.

NOTES FOR AUGUST.

THIS is a busy season for entomologists; butterflies are to be seen in hundreds in the warm sunshine, hovering over flowers, or flitting round trees; and moths, beetles, and flies of all kinds are to be found. Collectors in towns will generally be rewarded by a search round street lamps, which sometimes attract rare specimens. In the country it will be noticed that clover always tempts winged visitors, as does fallen fruit.

This is also a good time for collecting larvae; they should be looked for amongst the plants on which the insects are accustomed to feed; generally a good sharp shake of the plant will bring them down, but some cling so tightly that it is difficult to dislodge them.

Towards the end of the month, too, searching for pupæ may begin, a pursuit which lasts all through the winter months, from the end of August till the following spring. The pupæ are often found hidden under the moss and lichen on tree trunks, or under the grass and leaves at the foot of the trees. When trees stand alone, or in a line, many pupæ will be found by turning up the earth round their trunks with a trowel. The eaves of thatched roofs and corners of old barns nearly always contain treasures for the collector.

Although the bodies of full grown birds appear to be covered with feathers, it is a mistake to imagine that they grow on every part of the body. If they did, the free use of the limbs would be interfered with, and an unnecessary weight added. The feathers grow all over the head, except above the ears; the breast-bone seems to have none growing on it, but a line of feathers run down each side, so arranged as to cover it. The legs have a

fringe of feathers round the thigh, and another lower down, but the intermediate spaces are bare. The feathers all overlap one another, like the tiles on a roof.

Many of our country readers may be able, (by favour of the cook) to notice these lines of growth for themselves when a fowl has to be plucked; but anyone who has the opportunity of visiting the very interesting Natural History Museum at South Kensington will have the subject made clear to them if they look out for a thrush which is there, preserved specially to illustrate this growth.

The whole subject of the flight of birds is a very interesting one. The muscles of the chest, which move the wings, are enormously strong in proportion to the size of their bodies, especially in birds of prey, and others which need to keep long on the wing, though they have very little muscular power anywhere else. M. Marcy, a French observer, tells us that it is the act of lowering the wing, together with the backward motion which always accompanies it, which propels the body forward, just like the motion of the arms in swimming. During the raising of the wing, the feathers separate so as to let the air pass through them, thus offering the least possible resistance; but they close together again as tightly as possible for the lowering motion, when the object is to displace the air. In order to sink to the earth, the bird folds its wings close to the body, at the same time lowering its tail, which acts as a rudder, pointing up, or down, or sideways, according to the direction the bird wishes to take.

The small birds move their wings more quickly than the large ones; M. Marcy, has calculated that sparrows make thirteen

evolutions of wing, pigeons eight, and owls five, per minute.

Without this means of moving rapidly from place to place, and of remaining a long time on the wing, it would be impossible for birds to supply their wants, for their food is so scattered that they need to take a long journey sometimes before they can get a sufficient meal.

The swift, as its name suggests, is the quickest flier of its tribe. It has been computed that the common swallow travels at the rate of ninety miles an hour, and that the speed of the swift is nearly twice as great. He leaves us in August, the first to go of all the swallow tribe. His shrill scream, as he rushes through the air, is one of the most markedly summer sounds, as is the robin's song of winter, and the cuckoo's note of spring.

Many seeds should be sown now for next year's flowering; amongst these are larkspur, honesty, forget-me-not, pansy, and violet. The seed should be well thinned when it comes up, that the plants may get on as much as possible before winter. In green-houses, and among window plants, "green-fly" must be guarded against. If a plant is infested with them, the best remedy is to wash each leaf with Gishurst compound, or a mixture of soft soap with a tablespoonful of petroleum to a gallon of hot water. It is not a pleasant operation, but a favourite plant is worth a little sacrifice.

Cut off the stalks of perennials, and pull up annuals as they finish flowering; and tie up hollyhocks, dahlias, and chrysanthemums. Roll and cut the grass and borders; and sow grass seed where needed, on a damp day.

ANSWERS TO CORRESPONDENTS

EDUCATIONAL.

A YOUNG GIRL.—Phosphorus exists in the animal system in large quantities—in the flesh as well as in the bone. It is also an essential ingredient in the brain and nervous tissue. Fish contain a large quantity of phosphorus, and, in consequence, are useful as additions to our diet.

A. K. S.—The University of London admits women to all its degrees, without exception, in arts, science, law, medicine, and music. The age is sixteen years complete. Address, Registrar, University of London, Burlington Gardens, W.

C. E. B.—Pupil teachers are usually engaged for four years. They must be not less than fourteen years of age, and must be of the same sex as the principal teacher of the school in which they serve. At the end of each school year they must produce the certificates and pass the examination specified in the Fifth Schedule of the Code.

INQUIRER.—The great merit of Tycho Brahe was shown in the rare patience and industry with which he observed and recorded the positions of stars and planets, and his observations were of enormous service to his contemporary, Kepler, in discovering those famous laws known as Kepler's Three Laws, which ultimately led to the discovery of the grand theory of universal gravitation by Newton. These were unquestionably the great modern steps taken in astronomy.

MAGGIE.—There are plenty of night classes for learning bookkeeping which are moderate in price. We do not know where they are in the city where you live, but we are sure that by a little inquiry you would find them before long.

Fiji.—We should advise you to stay where you are, and, if you wish to improve, take lessons, and study for some of the many examinations. You could easily find a French teacher, and you would thus lose less time than in taking two years to visit England and France, and probably learn more.

G. L. W.—We think that you would find Perini's "Italian Conversation Grammar" very useful. De Amicis has written some very good works suitable for students of that language, viz., "Constantinopoli,"

"La Spagna," "L'Olanda," and "Recordi di Parigi."

VANITY.—We have already introduced the Home at Tunbridge Wells for children of the upper class, of the clergy, navy, and army, and other of the liberal professions. The temporary change of air likewise offered will be most valuable in the case of convalescent children whose parents may be unable to leave home or to pay more for an eight days' change than seven shillings. Address the hon. sec., Mrs. Ladds, Ellington Cottage, Tunbridge Wells.

HOUSEKEEPING.

SPRING CHICKEN.—We have recently read, in a very valuable article on taxidermy, that feathers of all kinds (and we should fancy other things of the same nature) can be beautifully cleaned by the use of common French benzoline and plaster of Paris. The feathers are wiped down the right way of the feathers with a piece of wool saturated with benzoline, using fresh wool as it becomes soiled. When the feather is well dampened cover the part with dry plaster of Paris, and allow it to remain on for some hours; then shake off the plaster of Paris, and curl with a blunt knife, if the feathers be ostrich. This recipe is a very valuable one, and has been found successful for many purposes.

ANXIETY.—You can make the violet ink for rubber stamps yourself. We find the following in that endless book of reference, Spon. Boil two ounces of logwood in three pints of water, till reduced to one and a half pint; strain, and add one and a half ounces of gum Arabic and two and a half ounces of alum. There are other recipes, but this seems the most suited to the home manufacturer.

HOUSEWIFE.—You should place yourself in communication with the National Association for the promotion of Housewifery and for the Training of Teachers, 41, Wigmore-street, W. If interested in the improvement of domestic service, on your own account or of servants, you will be glad to hear that model class rooms are about to be opened by Miss Headon in London and elsewhere for practical training.

DOLLY VARDEN.—We do not approve of the mixture

of chicory with coffee; but it is very good as salad. It is obtained from the roots of the wild endive (*Chicorium intybus*), which you may find growing on the roadside in dry and stony places. If you lay up the roots in a warm cellar, as sailors do, in a cask with sand, the cask full of holes, to allow the young leaves to protrude themselves, the crop obtained of blanched leaves will afford a nice dish for the table at no expense. The French adopt this plan very extensively. But beware of allowing the frost to touch them. Any old hamper or box, if well pierced with holes, would answer the purpose as well as a cask.

MISCELLANEOUS.

MYRA.—For the monthly part of the G.O.P., write to Mr. Tarn, 56, Paternoster-row, E.C., enclosing sevenpence.

UPPERTHORPE had better write to Sir Bernard Burke to tell him that she "takes exception to H. M. the Queen's having no surname." The Guelphs and Ghibellines were two great rival parties, prominent in the history of Mediaeval history; the former being advocates of the Papal power, the latter of the Imperial. The names were not "surnames," only those of two races. H.R.H. the "Heir Apparent" of our throne is the Prince "of Wales," but his surname is not Wales. You are (or may be) an Englishwoman, or a Highlander; but these are names of races, not private surnames. Sir Bernard Burke (Ulster King of Arms) says, "I feel persuaded that the Royal House of Saxe-Coburg *atavis edita regibus* has no surname. When the adoption of surnames became general, the ancestors of that illustrious race were kings, and needed no other designation than their Christian name added to the Royal title."

BETA and MOLLIE.—We suppose you mean "the Royal Agricultural Benevolent Institution," which pensions the widows and unmarried daughters of farmers with £20 per annum. Address the secretary, 26, Charles-street, St. James's, S.W., London. The applicants must be sixty years of age.

TWENTY.—We should think the circulation was in fault; consult a doctor. We (personally) should prefer commencing our tea with bread and butter, but there is no rule in the matter.



NOTES FOR SEPTEMBER.

It is interesting to notice the large number of persons who are spending their holidays this year in making walking tours through different parts of England, as showing the great change which has taken place in our national tastes in the matter of walking during the last hundred years. Moritz, in the diary of his journey through England, written in 1782, says:—

"A traveller on foot in this country seems to be considered as a sort of wild man, or out-of-the-way being, who is stared at, pitied, suspected, and shunned by everyone that meets him." And again: "When I told him I intended walking it (from Richmond to

Oxford), he looked at me significantly, shook his head, and went into the house again." "I was now confirmed in my suspicions that, in England, any person undertaking so long a journey on foot is sure to be looked upon and considered as either a beggar or a vagabond, or some necessitous wretch. A poor peripatetic is hardly allowed even the humble merit of being honest."

How differently John Burroughs writes a century later! In his "Winter Sunshine," published in 1884, he says:—

"It is indeed astonishing with what ease and hilarity the English walk. To an American it seems a kind of infatuation. . . We are not innocent and simple-hearted

enough to enjoy a walk. . . Their land (England) is threaded with paths which invite the walker, and which are scarcely less important than the highways. . . The English grandee is not confined to his carriage, but if the American aristocrat leaves his he is ruined."

Early autumn is almost the pleasantest time of all the year for walking. The trees, beginning to be tinged with the brilliant colours they put on later, the orchards full of fruit, and the hedgerows constantly showing something of fresh interest, make up a panorama always changing and always beautiful.

Visitors from foreign lands are almost invariably struck with the beauty of our hedges and shady lanes, even though their opinions may differ as to our walking powers. But perhaps there has really been the change in English habits that appears between the writings of the German pastor and the American naturalist, and if Pastor Moritz could return now he would find himself better treated than when he was refused a bed or a supper at the inns simply because he arrived on foot.

According to Sir John Lubbock bees and wasps differ in their tastes a good deal, both as to the flavour of the honey they prefer and the colour of the flowers they consider most

attractive. There are not many wasp flowers in England, and they are mostly dull coloured, for the wasp is not attracted, like the bee, by bright colours. Amongst the best known in England are the figworts and broomrape, both curious, dull coloured flowers, with corollas that wonderfully correspond to the shape of the wasp's head, and to its habits.

One figwort has a disagreeable odour to us, which probably its frequenters think most delicious; the broomrape too, does not please our taste in either colour or scent, but is beloved of wasps, who feed largely upon this curious parasite, which in its turn derives its nourishment from the roots of other plants. Bees, as a rule, begin to visit the lowest flowers of a spike first, and work upwards; therefore in the plants they chiefly feed upon the lower flowerets of the spike open first, ready to receive the pollen which the bee brings from another flower of the same kind, for it generally visits only one species of flower on each journey. Wasps, on the contrary, usually begin at the top flower of a spike; their favourite plants, therefore, open the top-most floweret first.

Birds are as a rule attracted by bright colours; hence the brilliant scarlet of so many

of our berries, such as hips and haws, which have to attract the birds by their brightness and sweet taste, to break them open and scatter their seeds over the earth.

Robins, although they eat insects in the spring, live chiefly on seeds, fruit, and berries, in the autumn. In some of the Greek islands this food is thought to make the birds themselves particularly delicate eating, and great numbers are, or were, eaten in the autumn.

There is plenty of work to do in the garden; winter aconite and anemones should be planted at the end of the month for spring flowering, as also snowdrops, narcissus, and jonquils. These look best in clumps, but each bulb must have plenty of room for growth; they do very well planted amongst shrubs, too, or in borders, but be careful to mark the place where bulbs are planted. Now is the time for propagating perennials by slips. Chrysanthemums must be protected from early frosts, and any annuals left in the garden, that have done flowering, should be taken away, and everything made tidy for the winter. The hedges should be clipped early in the month, as well as all borders and edgings; and finally, any spring flowers which need transplanting should be moved now to the place they are to occupy.

THE VICAR'S DAUGHTERS.

CHAPTER II.



HO can this be from?" Nessa exclaimed, as she returned to the room, holding up a square envelope.

It was a very thick and highly glazed paper, and had a showy coloured monogram which the two girls, putting their heads together, made out

to be S.K. The monogram was surmounted by a crest.

"How grand it looks!" observed Nessa, "I wonder who S.K. is? Do you know, Lottie?"

Lottie's cheeks were flushed, her hand trembled a little as she gave the letter into Nessa's hand to set upon the chimney-piece.

"Don't you remember that poor mamma's name was Kenyon, before she married papa?" said Lottie, in rather a low voice. "Perhaps—I wonder if it is from grandmamma!"

"What, from grandmamma who behaved so unkindly to papa? She is quite a great lady, isn't she?" Nessa inquired, in awestruck tones.

"Grandpapa was made a knight, so she is Lady Kenyon, and enormously rich, but that doesn't make her a great lady," replied Lottie, a little scornfully. "Papa's family is quite as good, and he is a gentleman, if he isn't rich."

"What did they quarrel about, do you know, Lottie? Mamma never told me."

"No, I don't know. I'm not sure even that grandmamma is alive; it is only a guess of mine," said Lottie.

They went on talking and speculating about

the letter and the unknown grandmother, till Mr. Dunstan returned from his rounds in the parish, when their curiosity would be satisfied.

Mr. Dunstan started when he saw the handwriting; it was associated in his mind with many painful memories. He held it poised in his hand a few minutes, as if reluctant to open it and examine its contents.

"It is from your grandmamma," he said, confirming Lottie's idea. When he opened the envelope and read the letter he looked grave, annoyed, his brows contracted. He stood on the rug, tall, spare, in his clerical garb, the letter in one hand, his double eye-glasses in the other.

"I will not show you girls this letter; it is impertinent, insulting," he said, the hot blood mounting to his pale cheeks; "but it is necessary that you should know the substance of it. Your grandmother wishes to take one of you to bring up and educate, on condition that I give up all authority over whichever of you she receives."

"Not me, papa!" Lottie exclaimed, clinging to her father's arm, "you will not send me away from you, and what could we do without Nessa?"

Nessa had merely ejaculated "Oh!" catching her breath at the idea of going to London. But then to be separated from Lottie, how could that be? If they could only both go, just for a little while!

"No, it would not be you, Lottie, for your grandmother wishes to have the one that is most like her own daughter; that is Nessa."

Nessa's heart beat fast; she looked at her father with eager inquiring eyes.

"But how could Nessa go to anyone who is unkind to you, papa?" said Lottie, in an indignant tone.

"It was to your mamma she was unkind; I had no claim upon her," returned the Vicar, gravely. "She never forgave your mamma because, instead of marrying a rich City man who was one of her suitors, she preferred me. And I was her equal in every way excepting as regarded money. But set that on one side, Nessa. I wish you to think this offer over.

You are old enough to have an opinion of your own. I must honestly tell you that I do not think your life with your grandmother would be very happy; still, you would have many advantages. We will take a day to consider and talk it over; to-morrow you can tell me what you would like to do."

Nessa was sorely perplexed in having this choice given to her. She was ambitious, and delighted in the amusements and luxuries such as she had caught a passing glimpse of when Mr. Clifford's family was at Brierford Hall. At the same time, she was warm-hearted and affectionate, and the idea of leaving her father and Lottie and Ronald, and all she loved, to go amongst strangers, was not to be borne. She cried herself to sleep at the very idea, and the next morning told her father that she would prefer to remain at home. This decision she perceived gave her father pleasure. The letter declining Lady Kenyon's proposal was written, Nessa posted it with her own hands, and so the matter dropped, as they supposed.

They reckoned without their host, however, without taking into account the obstinate self-will of a domineering woman, to whose wishes opposition only added force. It was the day on which Mr. Dunstan went to be introduced to the Bishop, who had expressed a wish to meet him. Lottie had gone to the Hall to consult Mrs. Benson about some domestic affairs, and Nessa sat crouched up with a book in her father's arm-chair, when a fly from Hunston, the nearest railway station, drove up to the door, and a magnificently dressed portly lady descended and came up the garden path to the front door. Nessa heard the knock, heard Hephzibah answer it, heard a brief colloquy, and then, while she sprang to her feet, the lady entered, sweeping aside her rich black silk skirt as if it might be contamination to come in contact with the faded, threadbare carpet. She cast a contemptuous glance round the room, and then fixed her eyes upon Nessa, her cold grey eyes, that softened a little as she saw her face.

"You are one of the twins, I suppose," the lady said, in a harsh voice.

"Yes, I am Vanessa Dunstan," the girl

a kind of dyspepsia is induced that is very difficult indeed to cure.

The lady in question is further recommended to dine early, and have supper three or four hours before going to bed.

A glass of cold water first thing in the morning and last at night will also do her good.

As for medicine in a case of this kind, there is nothing better than a blue pill at night, followed by a large glass of Pullna water before breakfast, and even this will not be required more than twice a week.

The labours of the day, so far as the mind is concerned, should be all over before supper. After this meal, light amusement may be indulged in, and reading and conversation does good; but anything that excites the nerves should be most strenuously avoided.

If it be possible a good long walk should be taken an hour after supper, or two hours before retiring for the night.

The habit of going to bed at a reasonable hour and getting up reasonably early should be adopted. A cold, or, at least, tepid bath, should be taken every morning, and a warm bath once or twice a week before going to bed.

Now, as to the bedroom itself. The larger and more airy it is the better. It should contain as little furniture as possible, and no garments should be left hanging about. It cannot be too well ventilated, and if the windows are left open all night in summer so much the better.

The window blinds should be of a colour to exclude a bright light, and I think nothing beats red holland. There should be no curtains around the bed, and although the room should be tolerably warm, it ought by no means to be hot.

The bed should be easy but not soft; a hair overlay covering a perfectly level woven-wire mattress conduces to the greatest comfort.

Warmth in bed should be maintained in a natural way, that is, by means of a sufficient quantity of bed-clothes, but these must not be heavy. It is better in winter for elderly people to have woollen sheets than cotton or linen ones.

As to a tile or jar of hot water, it often does good, but should not if possible be retained in the bed all night. It is only useful to keep the feet warm, for going into a cold bed often banishes the pleasant drowsiness that has

begun to steal over the senses before retiring. So by far the best plan is to have the bed warmed before going to it, not only in the centre but at top and bottom as well.

A word about what are called "night-caps." One form of night-cap is taken internally, another is used as a covering for the head. As a rule I object to the use of either, for the head should be kept cool, and both forms of night-cap have a tendency to heat it. However, sometimes the state of one's feelings must be consulted instead even of the doctor.

No sort of narcotic, however, is to be taken without the advice of the family physician; opium, chloral, chlorodyne, bromide of potassium, and the new "drug" called coco, can in this country and in the United States of America count their victims annually by the thousand.

Coffee. It is a strange thing that a cup of coffee should in many cases produce sleep, not directly, remember, therefore it is not a tonic, but if taken about an hour before retiring it calms the mind, especially if one has been subjected to mental strain or worry during the day. It will be better if taken without either milk or sugar, both these ingredients having a tendency to produce acidity.

NOTES FOR OCTOBER.



BIRDS migrate during this month more than any other; some are leaving us, and some coming for the winter. It is not only naturalists who study their flight, there are other observant watchers who might perhaps give some hints even to professional naturalists, for October is the month when bird-

catchers are on the alert; and they know the habits of every bird which it is worth their while to study.

Their prey consists of small singing-birds; and great numbers, especially of linnets, goldfinches, and larks are taken. The hen linnets are killed, and sold to the poulterer, but both cock and hen goldfinches are kept alive, perhaps because they are less easily distinguished, and so it is possible to pass the hens off in the large towns as cock birds. Most of the poor little creatures die very soon after they are caught, but if they survive the first few weeks' captivity they generally do well, so the price rises at first according to the length of time since their capture.

The bird-catcher's life is not an easy one. The best time for catching his prey is in the early dawn, so his nets have to be spread, and he must be standing on watch in the fields, while it is still dark; and early risers know how bitterly cold it sometimes is on a "chill October morning." By the time most people are astir his work is done, and he is gathering up his nets, and the tiny cages of decoy birds, and is preparing to trudge back to the nearest town with his load.

The apparatus used is very simple. A spot is chosen as a likely one for the birds to pass over in their flight; the nets are spread out on

the grass at the sides of the field, leaving a bare space in the middle; the decoy birds are distributed at intervals round the hedges; and then the catcher has nothing to do but wait patiently for his prey. Presently a flock of birds passes over head, the decoy birds call to them, and apparently out of sheer curiosity, or perhaps compassion for their fellows in distress, the whole flock pauses, then alights to see what is the matter. Their curiosity is their destruction; in an instant, by means of a cord and pulley, the fateful net is drawn over them, and their doom is sealed.

Bats, as a rule, hibernate during the winter, but in a mild season they may often be seen flying about at intervals all through the winter; probably to their own great discomfort, as there is not a sufficient supply of food for them in the cold weather. In Cornwall it is said they are to be seen all the year round, as long as the temperature does not fall below 50 degrees. Probably the same warm weather which keeps them from sinking into their usual state of torpor, also keeps awake a sufficient quantity of flies to supply them with food.

Bats have often been tamed, though as a rule they do not live long in captivity. They become very tame and affectionate, and make charming pets, with the one drawback of having a rather disagreeable smell. If kept in a cage, the wires must be very close, or they will get through; they can be fed on flies, moths, and scraps of raw meat, and have either milk or water to drink. Describing a pet bat, one gentleman says: "It often crept on the floor on 'all fours,' moving amazingly quickly from place to place, with an odd, hobbling motion. It was a noble hunter, only killing flies when they were on the wing. One evening it caught a large fly, and alighted with it on my shoulder, where it ate it all, save the wings."

Towards the end of the summer the leaves of the sycamore tree often become brown and shrivelled, and on examination are seen to be covered with black, or very dark brown spots. Till the microscope was brought to bear on them, the cause of these spots was very much disputed; some said that drops of rain, or dew,

acted as burning glasses, so that the rays of the sun shining through them caused the spots by actually burning the leaves. Others thought they were the work of insects; but it is generally agreed now that they are made by a fungus, the *Rhytisma acerinum*. The growth of this fungus is very interesting; the seeds are perfected in the old leaves after they fall, and are wafted by the wind on to the young leaves when they burst from their covering sheaths in the spring. When firmly established on the new leaf, the fungus first shows itself as a brownish stain; then little black spots appear on the brown mark, and finally the black specks spread, and form a black round stain, with a lighter coloured border. Looking down on the stain, it appears of an even black colour all over, except the edge; but if the leaf is held up to the light, it will be seen that some parts of it are more transparent than others, showing the different parts of the fungus growth. They are much thicker in the spring than when the leaves fall in the autumn. If the fallen leaves could all be burnt before the fungus has time to ripen, and scatter the seeds on the wind, this unsightly fungus might soon be stamped out.

It is almost a hopeless task at this time of year to try to keep our gardens tidy, when every fresh gust of wind strews the paths with fallen leaves. One may solace oneself, however, by finding many objects of interest in the untidy lawn; notice, for instance, the way worms draw the leaves into their holes. Worms are night-feeders, and the clearest traces of their work are to be found in the early morning.

Some of the spring flowers should be planted now; amongst these are the tuberous-rooted anemone; crocus, hyacinth, scilla, tulip and winter aconite. Most of these look best in clumps and thick lines, but crocuses and snowdrops are very effective on the lawn, or grassy banks. Hardy hollyhocks may be planted now, too, for next year's flowering; but all the tender varieties must have special care through the winter. Old plants which are to be left out, should be cut off near the ground, as soon as the flowers are over, and soil and dead leaves heaped up round the roots.

THE EDITOR OF "THE GIRL'S OWN PAPER" HAS A PROPOSITION TO MAKE.



HOSE who know anything of THE GIRL'S OWN PAPER will not think it an exaggeration if we say that it has become a power for good among the girls of all lands, wherever the English language is spoken.

There is scarcely a household even in remote corners of our country where it is not received and valued.

Its readers embrace all classes and all ages, and number many hundreds of thousands.

But power, success, and influence entail duties and responsibilities which, if neglected, detract from all three.

This powerful instrument for good is the girl's very own, and in order to obey its teaching and support its authority, each individual reader should recognise that as by its means the good has come to her, so she should by its means perform the duties and responsibilities incurred.

Many a kind act has been done by the readers of THE GIRL'S OWN PAPER; and many a burden has been made less by their self-denial and generosity. What is now asked of them is to combine for a great object, viz., to endue their own paper with life, and hand it down to future generations of girls as a source of comfort, help, and health to the weary and sad among them.

THE GIRL'S OWN PAPER has made acquaintance with many a one overburdened with incessant labour and home cares, and who, strive as she will, cannot put by a shilling towards a

little rest and change at the seaside, and so she goes on from year's end to year's end with almost a hopeless persistency, till at length she breaks down altogether, and those depending on her drift often into pauperism. All this might have been different could a helping hand have been offered, and the overworked girl sent to the seaside now and then, free of expense and free of care.

It is only necessary to go to some of the institutions now in working, either at the seaside or inland, to see their value, and the impossibility of taking in the crowds of those who are losing their power for work just for the chance of such a benefit as these institutions bestow.

THE GIRL'S OWN PAPER has great sympathy with those whose physical and mental powers are overtaxed in the struggle for independence, and it has a proposition to make, on their behalf, to its readers.

It is this—That a cottage should be rented, or, better still, bought either at Bognor, Scarborough, Seaford or Margate, and that it should be cleansed and fitted up for a Convalescent Home, say, at first to receive ten such girls as described, and that it should be registered as the "Girl's Own Convalescent Home."

Organised help for the carrying out of such a proposition will be necessary, and, should it find favour among our readers, it is suggested that every individual supporter should give one penny at once, and without a day's delay.

There is great strength in numbers, and if the readers are put down at 250,000, and every one gave a penny, it would result in a return of over £1,000.

Such a sum would warrant the commencement of the work, for which not only our own but future generations will have reason to be thankful.

Should any of the readers be well off, and desire in consequence to give sixpence or a shilling instead of the penny, so let it be—the Editor will be thankful; but let this first offering toward the object be speedy, as the penny or the sixpence will be a sign of the approbation and co-operation of the givers.

If those who had the means would guarantee a small sum yearly, it would be very helpful, and give an enduring character to the Home. The carrying out of the work must, of course, be undertaken with the utmost skill, care, and thought, and this may be well entrusted to the Editor and his staff.

Let no one fear, but remember what great things have been the result of small beginnings, provided the work be undertaken with earnest devoted hearts; it is only necessary to look at many of our Hospitals and Convalescent Homes to be sure of this.

The Hospital for the Paralysed, now so grand a building in Queen-square, was commenced in one small house, and with a capital of only £200, by two women.

The desire would be that the girls selected should be sent and returned, free of expense, to the Home, and remain there a fortnight; and thus, allowing that only ten at the time could be received, 250 would enjoy the privilege in the course of the year.

It would help to make the coming Christmas a happy one, if the necessary sum required for commencing the work were subscribed by that time.

Subscribers of pennies, sixpences or shillings might kindly group themselves, respectively, in a body of ten, twenty, thirty, or any such proportionate number, and send the total amount in postal notes to the Editor, under the name of the chief collector, to whom the acknowledgment will be made in the magazine.

DECEMBER.



Looking closely at them, we discover that the bright tints are in reality produced by plants—very tiny, it is true, but many of them of beautiful forms, as well as strange and brilliant colours. They should be examined first with a pocket magnifier, in order to select the finest specimens to take home for closer inspection under the microscope.

Many fungi may still be found in woods and pastures growing half hidden among dead leaves. Their brilliant colouring is all the more welcome from the absence of flowers and bright leaves.

In the summer, when every field and hedgebank is gay with flowers, we are apt to overlook many of the more insignificant plants, and it is only now, when flowers are scarce and the hedges are bare, that our attention is attracted to the common beauties of the roadside. Every bank, and nearly every garden lawn, will supply us with a daisy root, and there is much in it to be studied. No plant can flourish without a proper supply of air and light for its flowers; but the daisy grows so close to the ground, that it would surely be covered and smothered by the long grass around it if it could not protect itself in some way; but its very humility saves it. It has a circle of green leaves, pressed very closely on the ground above its root—so closely, that no grass can grow under them—and in this way

the little daisy secures a clear space for itself, just large enough for the air and the sunlight to reach it. It flowers nearly all the year round, and is one of the earliest plants visited by the bees.

The thrush usually begins to sing this month; but it has sometimes been known in a very mild season to sing all the winter.

"Are Animals Happy?" is the title of a paper in a recent number of the *Nineteenth Century*. Probably most girls have wondered vaguely to what extent they share the feelings of human beings. We feel few doubts that they are happy when we hear birds singing and see young animals at play, or watch the flight of a swallow or a seagull. But the question takes a different aspect in very cold or long-continued wet weather; but even then perhaps their sufferings are not so acute as we sometimes fear.

"It is undoubtedly true," says Briggs Carill, the author of this paper, "that every

year a certain number of animals are condemned to starvation, crowded out of existence by the pressure of surplus population, and this process must be attended by a certain amount of suffering. But it is exceedingly doubtful whether the suffering is of that intense and dramatic kind which is popularly associated with the struggle for existence. It is not the case of a strong healthy animal going alone out into the wilderness to struggle with the agonies of starvation; it is a process which takes effect principally on the very young or the very old. The very young perish because their mother is too ill-nourished herself to supply them, or because they are not sufficiently vigorous to fend for themselves; the old go perhaps somewhat before their full time. In the one case life is stopped before

much pain can have been felt, in the other it is stopped after the greater part of its pleasure is past; in either case with very much less than the maximum of suffering."

There is very little to be done in the open garden now, and even that little must depend greatly upon the season. We often have our coldest weather in January, and when this is the case care is needed to protect delicate plants from the frost. If, on the other hand, it is a mild, open season, the aim must be to avoid keeping delicate plants too warm, thus encouraging them to grow, as frosts will probably come later and nip all the young shoots.

Peas and radishes may be sown in some warm sheltered corner of the kitchen garden towards the end of January, and it is time to sow mustard and cress in boxes indoors.

All indoor plants should be moistened with tepid water during the cold weather. They must not be made too wet; very few plants can bear to stand in water; but at the same time, as the air of a room is always rather dry, they need careful attention. Tap the pots sharply with your knuckles, and if you hear a sharp, ringing sound, water is wanted; but if the earth is sufficiently moist, the sound will be dull and leaden.

There are very few flowers in our gardens now, but Russian violets may often be gathered from under the snow. Hepatica, too, should be in flower, and the Christmas rose. The latter is injured by transplanting, and should be set at first where it is intended to remain, and where there is room for it to increase into a large mass.

HOW TO COOK RABBITS.

By PHILLIS BROWNE, Author of "The Girl's Own Cookery Book."



RABBITS are in full season just now. They constitute a very pleasant change from butcher's meat, are not expensive, and are useful because they can be served in a great variety of ways, all good. We will therefore turn

our attention during this lesson to rabbits.

Many years ago English rabbits were thought to be superior to all others; now Ostend rabbits are popular. There are people, however, who think tame and Ostend rabbits are dry and insipid—wild rabbits are the delicacy; others say that wild rabbits are coarse and comparatively tough—it is Ostend rabbits which are tender and delicate in flavour. We generally find that where a great many persons hold diametrically opposite opinions there is a good deal to be said on both sides, and the truth lies between them. So it is here. Of the two varieties, wild rabbits are the more tasty, Ostend rabbits the more delicate. Both kinds may be used to advantage; wild rabbits for civets or stews, tame and Ostend rabbits for boiling, pies, puddings, and curries.

Young rabbits only, which have been recently killed, should be used for the table. It is very easy to decide whether or not rabbits are fresh. A very limited experience would enable a housekeeper to tell almost at a glance whether or not a rabbit was in good condition. Ostend rabbits are sent to this country already skinned; indeed, I believe that they are reared chiefly for the sake of their skin, which is used for making muffs and tippets. When the coats are removed the bodies are packed off to England to be sold at 8d. or 9d. a pound. The appearance of the flesh is a sufficient test of the freshness of Ostend rabbits; if this looks soft and pinky the rabbit has been recently imported. Wild rabbits are sold in their jackets. The inside portion round about the kidneys should be examined here; if the flesh looks white and dry and the body is stiff the rabbit is as it should be. The age of rabbits may be determined by examining the claws and ears. In old rabbits the claws are long and rough, the ears tough; choose, therefore, rabbits with smooth, sharp claws, and ears that will tear easily.

The simplest way of cooking food is not infrequently the best way. It is so with

rabbits, for they are never more delicious than when well boiled and "smothered in onions;" that is, served with onion sauce, a portion of which has been poured over them. The usual rules for boiling meat should be observed here also; that is, the rabbits should be wiped all over carefully with a damp cloth and plunged into boiling water sufficient to cover them; as the liquor comes to the boil it should be skimmed well; the pan should be drawn back. The rabbits should be boiled very gently till tender; from three-quarters of an hour to an hour will be required for a moderate-sized rabbit. A small piece of pickled pork is often boiled with the rabbit, but a few strips of bacon, toasted, fried, or cooked in the oven, are, to my mind, to be preferred. These strippets may either be served separately or they may be used to garnish the dish.

It is very usual for cooks to recommend that rabbits should be soaked for varying periods in cold or lukewarm water before being cooked. This is done to draw out the blood, so that the flesh may look white and delicate. It should, however, be remembered that with soaking the juice of the meat is drawn out, and the rabbit flesh is rendered dry and flavourless. I often wonder why people who are so fond of soaking meat do not soak it into the water while they are about it, for they evidently have washing day on their minds. Wash the rabbit if you will, or, at any rate, wipe it carefully in every part, especially inside, letting cold water run through it (for, of course, perfect cleanliness must be secured, and no one knows through whose hands the animal has passed), but wash quickly and dry speedily.

Also if the animal is old and not quite fresh, consequently in danger of having a strong taste, if it has been killed in such a way that the blood has spoilt its appearance, or if the gamey taste which belongs to wild rabbit is objected to, you may soak the rabbit, but remember that in getting rid of fresh juice you are getting rid both of nutriment and flavour.

By the way, I may say that one way of preserving the colour of rabbit is to boil the liver separately.

Boiled rabbit may be served with onion, liver, parsley, or celery sauce. The sauce first named is the most usual. When two rabbits are served together in a dish, the head of one should be laid in a different direction to that of the other.

One advantage connected with boiling rabbits is that you obtain deliciously flavoured

stock thereby. Rabbit stock is really a treasure to be carefully looked after and judiciously made the most of. Excellent soup may be made from it for a small additional cost. Here is a simple recipe if you want one.

Pare thinly a pint basinful of Jerusalem artichokes, and put them into a stewpan with a slice of butter, six peppercorns, two bay leaves, a few strips of bacon rind (cut from the rashers used for breakfast), which have been scalded and scraped to free them from all impurities. Put the lid on the pan and let the artichokes "sweat" for a few minutes, shaking them about occasionally to prevent burning. Pour on rabbit stock to cover the roots, and boil the artichokes till they are quite soft. Rub them through a hair sieve and add more rabbit stock to make the pulp as thick as gruel. Add salt to taste, boil the soup, and just before serving stir into it a quarter of a pint of boiling cream, more if allowed, or failing this a pint of boiling milk may be used.

Many cooks recommend that turnips, onions, and celery should be employed in flavouring the stock for artichoke, or, as it is called, Palestine soup. In my opinion any addition to the ingredients I have named will spoil the soup. Palestine soup made according to the recipe I have given will be delicious, and quite sufficiently nourishing to begin a dinner. If the artichokes are old a little sugar may be put with them.

Civet of Rabbit is an excellent dish. For this divide a fresh young rabbit into small neat joints, cut up also a quarter of a pound of bacon into dice and fry it. Take it up with a strainer, and fry the pieces of rabbit in the same fat. When nicely browned remove the meat, put back the bacon, and add an onion, a shallot, a small carrot, a small turnip, and a small bunch of herbs. Turn the vegetables over for a few minutes, then put back the rabbit, and with it a dozen small mushrooms and a pint of stock, and simmer gently till tender, or about half an hour. Remove the meat; mix a tablespoonful of flour into a smooth paste with cold water, stir this into the sauce till it thickens, add a glass of dark wine and a little salt. Arrange the rabbit neatly in a dish, pour the gravy over, and serve.

Rabbit stewed whole, sometimes called ragoût of rabbit, is very good. Perhaps you wonder what these terms ragoût and civet mean. M. Kettner, a very clever cook of whom I have spoken to you before, tells us that civet means chives, or small onions, and