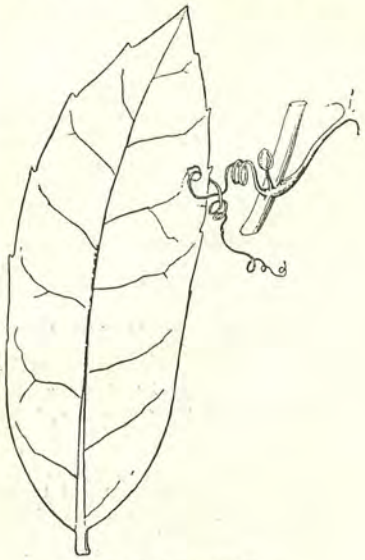
delightful problems which will reward the interested student. A single field has been found to contain as many as fifty different species of plants, and every month of the year will present a new aspect of life. In the early spring we have the germinating seed and the tiny growing



BRYONY TENDRIL.

moss. A little later the opening buds with their wealth of interesting points to study, then the unfolding of the leaves and the gradual development of the flower. Here and there a climbing plant will engage our attention, its mode of climbing, its modification of part or parts to enable it successfully to overcome difficulties, its acceptance of help by the way—as in the case of a bryony tendril I once came across which cleverly attached itself to a minute hole in a laurel leaf—these and many other items will interest us in our walks if we keep our eyes open.

Then, as summer slowly passes away and autumn approaches, the fruits will engage our attention; their forms and shapes and modes of dispersion will afford ample subjects for study.

Winter, too, still brings its store of pleasure for the young botanist. Nature is not dead—she only sleeps. Nay, unless there is hard frost and deep snow the field for observation is just as wide and the harvest as plentiful as at any other season. Look on the old apple-trees and see what a host of tiny plantlets there is there to glean. Here are pale green bearded moss and lichens, there a branch, perhaps, lies on the ground dead and decaying, under whose mouldering bark, if we have keen eyes, we may discover tiny tufts of the *Mycetozoa*, whose capsules, under the microscope (and in some cases even with the naked eye) are seen to give off clouds of spores, actually thrown out by the active movements of fine waving threads, a sight never to be forgotten when it has been watched under favourable circumstances. Winter is also rich in its harvest of mushroom-like fungi; these will well repay a little study. We shall be led to note their form, colour, mode and habit of growth, how they affect certain trees and soils, and the important difference of some kinds being eatable and others virulently poisonous; the mere book student can know very little of the keen pleasure enjoyed by those who thus think about what they see, and are ever adding to their stock of knowledge by personal observation. I may close with some true and beautiful thoughts by one * who is herself a reverent student of the book of Nature.

"No pleasure is more sure and none less costly than that of watching day by day the signs of the coming spring; than the delight of seeing unexpectedly the first primrose and of finding that the anemones and hyacinths are pushing their way to the sunshine. Year by year the miracle of spring-time, when the green leaves are shaken forth from the hard bud, is more

TRICHIA THROWING OUT SPORES.

miraculous. Summer after summer the lilies are fairer, the wild roses more exquisite, and on through the seasons the varying pleasures succeed one another. These things never pall; and if the time should come when we can no longer go out to the hills and woods to welcome the spring and revel in the bounty of summer we know that the past is not lost. The fair remembrance of the flowers of the field is safe in our hearts, and will 'flash upon that inward eye which is the bliss of solitude.'"

* Miss Blanche Atkinson, Founder of the Barmouth Branch of the Selborne Society.

REPLIES TO OFTEN-ASKED QUESTIONS.

I am seventeen years old, under five feet high and very stout, can you help me to improve my appearance?—You should not remain too long indoors, especially not writing or studying, but take plenty of exercise in the fresh air, in the country if possible. As regards your diet, very little farinaceous food and no alcohol should be taken, but there is no advantage in limiting the amount of fatty food. For exercise you should walk about three miles a day, and do besides a little gymnastic exercise.

What should be the contents of a medicine cupboard for an isolated country cottage?—A well-stocked medicine cupboard should contain—scissors, lint, absorbent wool, calico bandages one inch, one and a half inches and two inches in diameter, each eight yards long, sticking plaster, sal alembroth gauze for dressing wounds, and a solution of carbolic acid, one part in sixty of water, with which all wounds should be washed before being bound up; this solution should be labelled poison. Besides these it is advisable to have some collodion, which is an excellent preparation for slight cuts, as it protects them with a thin transparent film, which is not unsightly like sticking plaster, and some eucalyptus ointment spread on lint for burns and scalds.

Of drugs for internal use, the following are those most frequently used. They are given below with their doses and the complaints for which they are intended.

Pill of aloes and nux vomica—℞ extract of nux vomica, ¼ grain; pill of Barbados aloes, 5 grains. One at night time, aperient. Calomel, dose, ¼ to 3 grains for biliousness, bilious headache, etc.

Sulphate of magnesia, dose ½ to 2 drachms, aperient.

Carbonate of soda, dose 5 to 20 grains, stomachic.

Rhubarb and magnesia (Gregory's powder), dose 5 to 20 grains, stomachic.

Subnitrate of bismuth, dose 10 to 30 grains indigestion, vomiting, etc.

Spirit of camphor, dose 10 to 30 drops for colic.

Spirit of ginger, dose 5 to 20 drops for indigestion.

Bromide of potassium, dose 10 to 30 grains for sleeplessness.

Phenacetin, dose 5 to 10 grains for headache.

Citrate of caffein, dose 5 to 10 grains for headache and nervous prostration.

Aromatic spirits of ammonia, 10 to 60 drops for fainting, palpitation, etc.

Paregoric, 10 to 60 drops for cough.

Quinine sulphate, dose ½ to 5 grains for cold in the head, feverishness, etc.

Alum, 1 teaspoonful in half-a-pint of warm water for a mouth wash. Chlorate of potash, one part in twenty of water for a gargle for sore throat, etc.

Glycerine for chapped hands, etc.

Mustard, about one tablespoonful in half a tumbler of warm water, which makes the best emetic for accidental poisoning that we possess.